

UNITED STATES SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
Form 10-K

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2017

or

**TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission File Number: 01-14010

Waters Corporation

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of
incorporation or organization)

13-3668640

(I.R.S. Employer
Identification No.)

34 Maple Street

Milford, Massachusetts 01757

(Address, including zip code, of principal executive offices)

(508) 478-2000

(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: Common Stock, par value \$0.01 per share
New York Stock Exchange, Inc.

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate website, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See the definitions of "large accelerated filer", "accelerated filer", "smaller reporting company", and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non-accelerated filer Smaller reporting company
(Do not check if a smaller reporting company) Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act). Yes No

State the aggregate market value of the registrant's common stock held by non-affiliates of the registrant as of July 1, 2017: \$14,672,588,076.

Indicate the number of shares outstanding of the registrant's common stock as of February 16, 2018: 78,784,462

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement that will be filed for the 2018 Annual Meeting of Stockholders are incorporated by reference in Part III.

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WATERS CORPORATION AND SUBSIDIARIES
ANNUAL REPORT ON FORM 10-K

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PART I

Item 1: *Business*

General

Waters Corporation (the “Company”) is a specialty measurement company that has pioneered analytical workflow solutions involving liquid chromatography, mass spectrometry and thermal analysis innovations serving the life, materials and food sciences for nearly 60 years. The Company primarily designs, manufactures, sells and services high performance liquid chromatography (“HPLC”), ultra performance liquid chromatography (“UPLC®”) and together with HPLC, referred to as “LC”) and mass spectrometry (“MS”) technology systems and support products, including chromatography columns, other consumable products and comprehensive post-warranty service plans. These systems are complementary products that are frequently employed together (“LC-MS”) and sold as integrated instrument systems using common software platforms. In addition, the Company designs, manufactures, sells and services thermal analysis, rheometry and calorimetry instruments through its TA® product line. The Company is also a developer and supplier of advanced software-based products that interface with the Company’s instruments, as well as other manufacturers’ instruments.

The Company’s products are used by life science, pharmaceutical, biochemical, industrial, nutritional safety, environmental, academic and governmental customers working in research and development, quality assurance and other laboratory applications. LC is a standard technique and is utilized in a broad range of industries to detect, identify, monitor and measure the chemical, physical and biological composition of materials, and to purify a full range of compounds. MS technology, principally in conjunction with chromatography, is employed in drug discovery and development, including clinical trial testing, the analysis of proteins in disease processes (known as “proteomics”), nutritional safety analysis and environmental testing. LC-MS instruments combine a liquid phase sample introduction and separation system with mass spectrometric compound identification and quantification. The Company’s thermal analysis, rheometry and calorimetry instruments are used in predicting the suitability and stability of fine chemicals, pharmaceuticals, water, polymers, metals and viscous liquids for various industrial, consumer goods and healthcare products, as well as for life science research.

Waters Corporation, organized as a Delaware corporation in 1991, is a holding company that owns all of the outstanding common stock of Waters Technologies Corporation, its operating subsidiary. Waters Corporation became a publicly-traded company with its initial public offering (“IPO”) in November 1995. Since the IPO, the Company has added two significant and complementary technologies to its range of products with the acquisitions of TA Instruments in May 1996 and Micromass Limited in September 1997.

Business Segments

The Company’s business activities, for which discrete financial information is available, are regularly reviewed and evaluated by the chief operating decision maker. As a result of this evaluation, the Company determined that it has two operating segments: Waters® and TA®. The Waters operating segment is primarily in the business of designing, manufacturing, distributing and servicing LC and MS instrument systems, columns and other precision chemistry consumables that can be integrated and used along with other analytical instruments. The TA operating segment is primarily in the business of designing, manufacturing, distributing and servicing thermal analysis, rheometry and calorimetry instruments. The Company’s two operating segments have similar economic characteristics; product processes; products and services; types and classes of customers; methods of distribution; and regulatory environments. Because of these similarities, the two segments have been aggregated into one reporting segment for financial statement purposes.

Information concerning revenues and long-lived assets attributable to each of the Company’s products, services and geographic areas is set forth in Note 16 in the Notes to the Consolidated Financial Statements, which is incorporated herein by reference.

Waters Products and Markets

High Performance and Ultra Performance Liquid Chromatography

HPLC is a standard technique used to identify and analyze the constituent components of a variety of chemicals and other materials. The Company believes that HPLC's performance capabilities enable it to separate, identify and quantify a high proportion of all known chemicals. As a result, HPLC is used to analyze substances in a wide variety of industries for research and development purposes, quality control and process engineering applications.

The most significant end-use markets for HPLC are those served by the pharmaceutical and life science industries. In these markets, HPLC is used extensively to understand diseases, identify new drugs, develop manufacturing methods and assure the potency and purity of new pharmaceuticals. HPLC is also used in a variety of other applications, such as analyses of foods and beverages for nutritional labeling and compliance with safety regulations and the testing of water and air purity within the environmental testing industry, as well as applications in other industries, such as chemical and consumer products. HPLC is also used by universities, research institutions and governmental agencies, such as the United States Food and Drug Administration ("FDA") and the United States Environmental Protection Agency ("EPA") and their foreign counterparts that mandate safety and efficacy testing.

In 2004, Waters introduced a novel technology that the Company describes as ultra performance liquid chromatography that utilizes a packing material with small, uniform diameter particles and a specialized instrument, the ACQUITY UPLC®, to accommodate the increased pressure and narrower chromatographic bands that are generated by these small and tightly packed particles. By using the ACQUITY UPLC, researchers and analysts are able to achieve more comprehensive chemical separations and faster analysis times in comparison with many analyses previously performed by HPLC. In addition, in using the ACQUITY UPLC, researchers have the potential to extend the range of applications beyond that of HPLC, enabling them to uncover more levels of scientific information. While offering significant performance advantages, the ACQUITY UPLC is also compatible with the Company's software products and the general operating protocols of HPLC. For these reasons, the Company's customers and field sales and support organizations are well positioned to utilize this new technology and instrument. In 2015, the Company introduced the ACQUITY® Arc System and its enabling Arc Multi-flow path™ technology, which bridges the gap between HPLC and UPLC by emulating a variety of HPLC systems without altering the method's gradient table and enabling improved chromatographic performance of methods by leveraging 2.5-2.7 micron particle column technologies.

Waters manufactures LC instruments that are offered in configurations that allow for varying degrees of automation, from component configured systems for academic teaching and research applications to fully automated systems for regulated and high sample throughput testing, and that have a variety of detection technologies, from optical-based ultra-violet ("UV") absorbance, refractive index and fluorescence detectors to a suite of MS-based detectors, optimized for certain analyses.

The primary consumable products for LC are chromatography columns. These columns are packed with separation media used in the LC testing process and are typically replaced at regular intervals. The chromatography column contains one of several types of packing material, typically stationary phase particles made from silica or polymeric resins. As a pressurized sample is introduced to the column inlet and permeates through the packed column, it is separated into its constituent components.

Waters HPLC columns can be used on Waters-branded and competitors' LC systems. The Company believes that it is one of a few suppliers in the world that processes silica and polymeric resins, packs columns and distributes its own products. In doing so, the Company believes it can better ensure product consistency, a key attribute for its customers in quality control laboratories, and can react quickly to new customer requirements. The Company believes that its ACQUITY UPLC lines of columns are used primarily on its ACQUITY UPLC instrument systems and, furthermore, that its ACQUITY UPLC instruments primarily use ACQUITY UPLC columns. In 2015, the Company introduced the Oasis® PRiME HLB cartridges, which process

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samples up to 40% faster and deliver samples that are up to 70% cleaner with fewer LC-MS matrix effects than samples prepared using other extraction techniques. In addition, the ACQUITY UPLC® Glycoprotein BEH Amide columns were introduced in 2015 to help biopharmaceutical companies to better understand where glycan groups (bonded sugars) are located within the therapeutic proteins they are developing and manufacturing. In 2016, the Company continued to expand its column chemistry capabilities through the introduction of CORTECS® C₈, CORTECS® Phenyl, CORTECS® T3 and CORTECS® Shield RP18.

The Company's precision chemistry consumable products also include environmental and nutritional safety testing products, including Certified Reference Materials ("CRM"s) and Proficiency Testing ("PT") products. Laboratories around the world and across multiple industries use these products for quality control and proficiency testing and also purchase product support services required to help with their federal and state mandated accreditation requirements or with quality control over critical pharmaceutical analysis.

Mass Spectrometry and Liquid Chromatography-Mass Spectrometry

MS is a powerful analytical technology that is used to identify unknown compounds, to quantify known materials and to elucidate the structural and chemical properties of molecules by measuring the masses of molecules that have been converted into ions.

The Company is a technology and market leader in the development, manufacture, sale and distribution of MS instruments and components. These instruments are typically integrated and used along with other complementary analytical instruments and systems, such as LC, chemical electrophoresis and gas chromatography. A wide variety of instrumental designs fall within the overall category of MS instrumentation, including devices that incorporate quadrupole, ion trap, time-of-flight ("ToF"), magnetic sector and ion mobility technologies. Furthermore, these technologies are often used in tandem (MS-MS) to maximize the speed and/or efficacy of certain experiments.

Currently, the Company offers a wide range of MS instrument systems utilizing various combinations of quadrupole, ToF and ion mobility designs. These instrument systems are used in drug discovery and development, as well as for environmental, clinical and nutritional safety testing. The overwhelming majority of mass spectrometers sold by the Company are designed to utilize an LC system and a liquid compatible interface (such as an electrospray ionization source) as the sample introduction device. These products supply a diverse market with a strong emphasis on the life science, pharmaceutical, biomedical, clinical, food and beverage and environmental market segments worldwide.

MS is an increasingly important detection technology for LC. The Company's smaller-sized mass spectrometers, such as the single quadrupole detector ("SQD") and the tandem quadrupole detector ("TQD"), are often referred to as LC "detectors" and are typically sold as part of an LC system or as an LC system upgrade. Larger quadrupole systems, such as the Xevo® TQ and Xevo® TQ-S instruments, are used primarily for experiments performed for late-stage drug development, including clinical trial testing. Quadrupole time-of-flight ("Q-ToF™") instruments, such as the Company's SYNAPT® G2-S, are often used to analyze the role of proteins in disease processes, an application sometimes referred to as "proteomics". In 2015, the Company introduced the GlycoWorks® RapiFluor-MS® N-Glycan Kit, which enables fast de-glycosylation and labeling, reduces sample preparation time and allows mass detection for characterization and development with enhanced sensitivity. In 2016, the Company introduced the Xevo® TQ-XS mass spectrometry system enabled by the newly designed StepWave™ SX ion guide, which features a unique combination of ion optics, detection and ionization technologies resulting in levels of sensitivity not previously seen. The Company also introduced SONAR in 2016, which is a new data acquisition technology for use with the Xevo G2-XS that allows for the quantification and identification of lipids, metabolites and proteins in complex samples in a more efficient manner.

In November 2015, the Company acquired all of the outstanding stock of MPE Orbur Group Limited and its sole operating subsidiary, Midland Precision Equipment Company, Ltd. ("MPE"), a manufacturer of MS

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instrumentation components, for \$12 million, net of cash acquired. MPE is a highly skilled manufacturer and former Waters supplier that produces critical components that support the Company's MS instrument systems.

LC and MS are typically embodied within an analytical system tailored for either a dedicated class of analyses or as a general purpose analytical device. An increasing percentage of the Company's customers are purchasing LC and MS components simultaneously and it has become common for LC and MS instrumentation to be used within the same laboratory and operated by the same user. The descriptions of LC and MS above reflect the historical segmentation of these analytical technologies and the historical categorization of their respective practitioners. Increasingly in today's instrument market, this segmentation and categorization is becoming obsolete as a high percentage of instruments used in the laboratory embody both LC and MS technologies as part of a single device. In response to this development and to further promote the high utilization of these hybrid instruments, the Company has organized its Waters operating segment to develop, manufacture, sell and service integrated LC-MS systems.

Based upon reports from independent marketing research firms and publicly-disclosed sales figures from competitors, the Company believes that it is one of the world's largest manufacturers and distributors of LC and LC-MS instrument systems, chromatography columns and other consumables and related services.

The Company has been a developer and supplier of software-based products that interface with the Company's instruments, as well as other suppliers' instruments. The Company's newest software technology, UNIFI®, is a scientific information system that is the culmination of a multi-year effort to substantially bring all of Waters' preexisting, distinct software systems under one operating system. UNIFI joins Waters' suite of informatics products — Empower® Chromatography Data Software, MassLynx® Mass Spectrometry Software and NuGenesis® Scientific Data Management System, each of which is used to support innovations within world-leading institutions. UNIFI is the industry's first comprehensive software that seamlessly integrates UPLC chromatography, mass spectrometry and informatics data workflows. In 2015, the Company's introduction of the Vion IMS Q-ToF Mass Spectrometer marks the first Waters mass spectrometer to be fully supported on UNIFI. In 2016, the Company announced two reference libraries available within UNIFI, the Metabolic Profiling CCS Library and the *RapiFluor-MS*® Glycan GU Scientific Library. The Company also introduced Symphony Data Pipeline software in 2016, which is a client-server application that automates the movement and transformation of large amounts of LC-MS data to speed up analytical workflows and liberate scientists from mundane yet necessary tasks associated with managing data files.

Waters Service

Services provided by Waters enable customers to maximize technology productivity, support customer compliance activities and provide transparency into enterprise resource management efficiencies. The customer benefits from improved budget control, data-driven technology adoption and accelerated workflow at a site or on a global perspective. The Company considers its service offerings to be highly differentiated from our competition, as evidenced by a consistent increase in annual service revenues. The Company's principal competitors in the service market include PerkinElmer, Inc., Agilent Technologies, Inc., Thermo Fisher Scientific Inc. and General Electric Company. These competitors can provide certain services on Waters instruments to varying degrees and always present competitive risk.

The servicing and support of instruments, software and accessories is an important source of revenue and represents over 30% of sales for Waters. These revenues are derived primarily through the sale of support plans, demand services, spare parts, customer performance validation services and customer training. Support plans typically involve scheduled instrument maintenance and an agreement to promptly repair a non-functioning instrument in return for a fee described in a contract that is priced according to the configuration of the instrument.

TA Products and Markets

Thermal Analysis, Rheometry and Calorimetry

Thermal analysis measures the physical or thermodynamic characteristics of materials as a function of temperature. Changes in temperature affect several characteristics of materials, such as their heat flow characteristics, physical state, weight, dimension and mechanical and electrical properties, which may be measured by one or more thermal analysis techniques, including calorimetry. Consequently, thermal analysis techniques are widely used in the development, production and characterization of materials in various industries, such as plastics, chemicals, automobiles, pharmaceuticals and electronics.

Rheometry instruments often complement thermal analyzers in characterizing materials. Rheometry characterizes the flow properties of materials and measures their viscosity, elasticity and deformation under different types of “loading” or other conditions. The information obtained under such conditions provides insight into a material’s behavior during processing, packaging, transport, usage and storage.

Thermal analysis, rheometry and calorimetry instruments are heavily used in material testing laboratories and, in many cases, provide information useful in predicting the suitability and stability of industrial polymers, fine chemicals, pharmaceuticals, water, metals and viscous liquids in various industrial, consumer goods and healthcare products, as well as for life science research. As with systems offered by Waters, a range of instrument configurations is available with increasing levels of sample handling and information processing automation. In addition, systems and accompanying software packages can be tailored for specific applications. In 2015, TA introduced the TAM IV and TAM IV-48, which extend the operating temperature range (4°C to 150°C) with long-term temperature stability for measuring processes. In 2015, TA also introduced the Affinity ITC and ITC Auto, which are designed for the most challenging life science laboratory environments that require high sensitivity, high productivity and the most advanced isothermal titration calorimetry. In 2016, TA introduced a new line of differential scanning calorimeters and thermogravimetric analyzers. These new Discovery DSC systems feature enhanced sensing technologies resulting in unprecedented performance in baseline flatness, sensitivity, resolution and reproducibility. In addition, TA introduced the ACS-2 Air Chiller System, ElectroForce 3310 test instrument and DuraPulse™ Stent Graft test instrument in 2016. In 2017, TA introduced the TAM Air microcalorimeter. Although designed to characterize the curing of cement, this instrument is an ideal platform for imaginative experimental design in a wide range of applications, including cement and concrete, material science, food, pharmaceuticals and environmental analysis. TA also introduced three new dilatometer product lines in its 800 platform, which are high precision systems designed to measure dimensional changes of a specimen brought about by dynamic thermal events in a wide range of applications, including material science, ceramics and metals. In 2017, TA introduced the Discovery SDT 650, which is a simultaneous differential scanning calorimeter/thermogravimetric analyzer and, we believe, the only system capable of simultaneous DSC/TGA measurement. In addition, TA introduced the Discovery HP-TGA750, a benchtop high pressure TGA that utilizes a patented ultra-high resolution magnetic suspension balance and new high precision temperature control system. Late in 2017, TA introduced the Discovery DMA 850, which measures the viscoelastic mechanical properties of material under controlled conditions of temperature, environment and mechanical stimulus (stress or strain). The DMA 850 features frictionless air bearing supports and a linear optical encoder, which ensures stable, accurate, high-resolution displacement measurement across the full travel range and enables displacement control of 5 nm.

In May 2015, the Company acquired the net assets of the ElectroForce® business of the Bose Corporation (“ElectroForce”), a manufacturer of testing systems, for \$9 million in cash. ElectroForce’s core business is the manufacturing of dynamic mechanical testing systems used to characterize medical devices, biologic and engineered materials. The ElectroForce test instruments are based on unique motor designs that are quiet, energy-efficient and scalable, while delivering precise performance over a wide range of force and frequency. In 2017, TA introduced the WinTest® 8.0 software package, which will be standard on all new ElectroForce products. In addition, TA introduced the ElectroForce DMA 3200 in 2017, which combines fatigue and dynamic mechanical analysis into a single mechanical test platform.

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In September 2016, the Company acquired all of the outstanding stock of Rubotherm GmbH (“Rubotherm”), a manufacturer of gravimetric analysis systems, for approximately \$6 million in cash, \$5 million of which was paid at closing and an additional \$1 million paid after closing to settle certain liabilities. Rubotherm develops and manufactures analytical test instruments for thermogravimetric and sorption measurements that are used in both industrial and academic research laboratories in disciplines that include chemistry, material science and engineering. The Rubotherm acquisition will help support and further expand product offerings within TA’s thermal analysis business.

TA Service

Similar to Waters, the servicing and support of TA’s instruments is an important source of revenue and represents more than 25% of sales for TA. TA operates independently from the Waters operating segment, though many of its overseas offices are situated in Waters’ facilities to achieve operational efficiencies. TA has dedicated field sales and service operations. Service sales are primarily derived from the sale of support plans, replacement parts and billed labor fees associated with the repair, maintenance and upgrade of installed systems.

Global Customers

The Company typically has a broad and diversified customer base that includes pharmaceutical accounts, other industrial accounts, universities and governmental agencies. Purchase of the Company’s instrument systems is often dependent on its customers’ capital spending, or funding as in the cases of governmental, academic and research institutions, which often fluctuate from year to year. The pharmaceutical segment represents the Company’s largest sector and includes multinational pharmaceutical companies, generic drug manufacturers, contract research organizations (“CRO”s) and biotechnology companies. The Company’s other industrial customers include chemical manufacturers, polymer manufacturers, food and beverage companies and environmental testing laboratories. The Company also sells to universities and governmental agencies worldwide. The Company’s technical sales and support staff members work closely with its customers in developing and implementing applications that meet their full range of analytical requirements. During 2017, 56% of the Company’s sales were to pharmaceutical accounts, 31% to other industrial accounts and 13% to governmental agencies and academic institutions.

The Company typically experiences an increase in sales in the fourth quarter, as a result of purchasing habits for capital goods of many customers who tend to exhaust their spending budgets by calendar year end. The Company does not rely on any single customer for a material portion of its sales. During fiscal years 2017, 2016 and 2015, no single customer accounted for more than 2% of the Company’s net sales.

Sales and Service

The Company has one of the largest direct sales and service organizations focused exclusively on the analytical workflows offered by the Company. Across these product technologies, using respective specialized sales and service workforces, the Company serves its customer base with 88 sales offices throughout the world as of December 31, 2017 and approximately 3,800, 3,600 and 3,400 field representatives in 2017, 2016 and 2015, respectively. This investment in sales and service personnel serves to maintain and expand the Company’s installed base of instruments. The Company’s sales representatives have direct responsibility for account relationships, while service representatives work in the field to install instruments, train customers and minimize instrument downtime. In-house and field-based technical support representatives work directly with customers, providing them assistance with applications and procedures on Company products. The Company provides customers with comprehensive information through various corporate and regional internet websites and product literature, and also makes consumable products available through electronic ordering facilities and a dedicated catalog.

Manufacturing and Distribution

The Company provides high product quality by overseeing each stage of the production of its instruments, columns and chemical reagents.

The Company currently assembles a portion of its LC instruments at its facility in Milford, Massachusetts, where it performs machining, assembly and testing. The Milford facility maintains quality management and environmental management systems in accordance with the requirements of ISO 9001:2008, ISO 13485:2003 and ISO 14001:2004, and adheres to applicable regulatory requirements (including the FDA Quality System Regulation and the European In-Vitro Diagnostic Directive). The Company outsources manufacturing of certain electronic components, such as computers, monitors and circuit boards, to outside vendors that meet the Company's quality requirements. In addition, the Company outsources the manufacturing of certain LC instrument systems and components to well-established contract manufacturing firms in Singapore. The Company's Singapore entity is ISO 9001:2008 certified and manages all Asian outsourced manufacturing as well as the distribution of all products from Asia. The Company may pursue outsourcing opportunities as they arise but believes it maintains adequate supply chain and manufacturing capabilities in the event of disruption or natural disasters.

The Company manufactures specialty Supercritical Fluid Chromatography ("SFC") and Supercritical Fluid Extraction ("SFE") products in its facility in Sharpsburg, Pennsylvania. The Sharpsburg facility is aligned with the policies and procedures for product manufacturing and distribution as adhered to in the Milford, Massachusetts facility and is under the same structural leadership organization.

The Company primarily manufactures and distributes its LC columns at its facilities in Taunton, Massachusetts and Wexford, Ireland. The Taunton facility processes, sizes and treats silica and polymeric media that are packed into columns, solid phase extraction cartridges and bulk shipping containers in both Taunton and Wexford. The Wexford facility also manufactures and distributes certain data, instruments and software components for the Company's LC, MS and TA product lines. The Company's Taunton facility is certified to ISO 9001:2008. The Wexford facility is certified to ISO 9001:2015 and ISO 13485:2003/EN ISO 13485:2012. VICAM® manufactures antibody-linked resins and magnetic beads that are packed into columns and kits in Milford, Massachusetts and Nixa, Missouri. The Company manufactures and distributes its Analytical Standards and Reagents and Environmental Resource Associates ("ERA") product lines at its facility in Golden, Colorado, which is certified to ISO 9001:2015 and accredited to ISO/IEC 17025, ISO/IEC 17034 and ISO Guide 34. Some ERA products are also manufactured in the Wexford, Ireland facility, which is also accredited to ISO/IEC 17025:2005, ISO/IEC 17034:2016.

The Company manufactures and distributes its MS products at its facilities in Wilmslow, England and Wexford, Ireland. Certain components or modules of the Company's MS instruments are manufactured at its facility in Solihull, England and by long-standing outside contractors. Each stage of this supply chain is closely monitored by the Company to maintain high quality and performance standards. The instruments, components or modules are then returned to the Company's facilities, where its engineers perform final assembly, calibrations to customer specifications and quality control procedures. The Company's MS facilities are certified to ISO 9001:2008 and ISO 13485:2003/EN ISO 13485:2012 and adhere to applicable regulatory requirements (including the FDA Quality System Regulation and the European In-Vitro Diagnostic Directive).

TA's thermal analysis, rheometry and calorimetry products are manufactured and distributed at the Company's New Castle, Delaware, Wakefield, Massachusetts, Eden Prairie, Minnesota, Lindon, Utah, Bochum, Germany, Huellhorst, Germany, Wetzlar, Germany and Ede, Netherlands facilities. Similar to MS, elements of TA's products are manufactured by outside contractors and are then returned to the Company's facilities for final assembly, calibration and quality control. The Company's New Castle facility is certified to ISO 9001:2008 standards and the Eden Prairie facility is certified to both ISO 9001:2008 and ISO/IEC 17025:2005 standards.

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Raw Materials

The Company purchases a variety of raw materials, primarily consisting of high temperature alloy sheet metal and castings, forgings, pre-plated metals and electrical components from various vendors. The materials used by the Company's operations are generally available from a number of sources and in sufficient quantities to meet current requirements subject to normal lead times.

The Company is subject to rules of the Securities and Exchange Commission ("SEC") under the Dodd-Frank Wall Street Reform and Consumer Protection Act, requiring disclosure as to whether certain materials (tantalum, tin, gold and tungsten), known as conflict minerals, which may be contained in the Company's products, are mined from the Democratic Republic of the Congo and adjoining countries. In 2016, the Company was not able to determine with certainty the country of origin of some of the conflict minerals in its manufactured products. However, the Company does not have knowledge that any of its conflict minerals originated from the Democratic Republic of the Congo or adjoining countries. The Company is in the process of evaluating its 2017 supply chain, and the Company plans to file its 2017 Form SD with the SEC in May 2018. The results of this and future evaluations may impose additional costs and may introduce new risks related to the Company's ability to verify the origin of any conflict minerals contained in its products.

In addition, the Company continues to monitor environmental health and safety regulations in countries in which it operates throughout the world, in particular, European Union and China Restrictions on the use of certain Hazardous Substances in electrical and electronic equipment (RoHS) and European Union Waste Electrical and Electronic Equipment directives. Further information regarding these regulations is available on the Company's website, www.waters.com, under the caption "About Waters / Environmental Health & Safety".

Research and Development

The Company maintains an active research and development program focused on the development and commercialization of products that extend, complement and update its existing product offering. The Company's research and development expenditures for 2017, 2016 and 2015 were \$133 million, \$125 million and \$119 million, respectively. In addition, in 2017 and 2015, the Company incurred charges of \$5 million and \$4 million, respectively, for acquired in-process research and development related to milestone payments associated with a licensing arrangement for certain intellectual property relating to mass spectrometry technologies yet to be commercialized and for which there was no future alternative use as of the acquisition date. These licensing arrangements are significantly related to new, biologically-focused applications, as well as other applications, and require the Company to make additional future payments of up to \$7 million if certain milestones are achieved, as well as royalties on future net sales.

Nearly all of the Company's LC products have been developed at the Company's main research and development center located in Milford, Massachusetts, with input and feedback from the Company's extensive field organizations and customers. The majority of the Company's MS products are developed at facilities in England and most of the Company's current materials characterization products are developed at the Company's research and development center in New Castle, Delaware. At December 31, 2017, 2016 and 2015, there were 1,004, 971 and 955 employees, respectively, involved in the Company's research and development efforts. The Company has increased research and development expenses from its continued commitment to invest significantly in new product development and existing product enhancements, and as a result of acquisitions. Despite the Company's active research and development programs, there can be no assurance that the Company's product development and commercialization efforts will be successful or that the products developed by the Company will be accepted by the marketplace.

Employees

The Company employed approximately 7,000, 6,900 and 6,600 employees at December 31, 2017, 2016 and 2015, respectively, with approximately 41% of the Company's employees located in the United States. The

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Company believes its employee relations are generally good. The Company's employees are not unionized or affiliated with any internal or external labor organizations. The Company firmly believes that its future success largely depends upon its continued ability to attract and retain highly skilled employees.

Competition

The analytical instrument systems, supplies and services market is highly competitive. The Company encounters competition from several worldwide suppliers and other companies in both domestic and foreign markets for each of its three primary technologies. The Company competes in its markets primarily on the basis of product performance, reliability, service and, to a lesser extent, price. Competitors continuously introduce new products and have instrument businesses that are generally more diversified than the Company's business. Some competitors have greater financial resources and broader distribution than the Company's.

In the markets served by Waters, the Company's principal competitors include: Agilent Technologies, Inc., Shimadzu Corporation, Bruker Corporation, Danaher Corporation and Thermo Fisher Scientific Inc. In the markets served by TA, the Company's principal competitors include: PerkinElmer, Inc., Mettler-Toledo International Inc., NETZSCH-Geraetebau GmbH, Thermo Fisher Scientific Inc., Malvern PANalytical Ltd. as a subsidiary of Spectris plc and Anton-Paar GmbH.

The market for consumable LC products, including separation columns, is highly competitive and generally more fragmented than the analytical instruments market. The Company encounters competition in the consumable columns market from chemical companies that produce column sorbents and small specialized companies that primarily pack purchased sorbents into columns and subsequently package and distribute columns. The Company believes that it is one of the few suppliers that processes silica and polymeric resins, packs columns and distributes its own products. The Company competes in this market on the basis of performance, reproducibility, reputation and, to a lesser extent, price. In recent years, the Company's principal competitors for consumable products have included: Danaher Corporation; Merck KGaA, Darmstadt, Germany; Agilent Technologies, Inc.; General Electric Company and Thermo Fisher Scientific Inc. The ACQUITY UPLC instrument is designed to offer a predictable level of performance when used with ACQUITY UPLC columns and the Company believes that the expansion of the ACQUITY UPLC instrument base will enhance its chromatographic column business because of the high level of synergy between ACQUITY UPLC columns and the ACQUITY UPLC instruments.

Patents, Trademarks and Licenses

The Company owns a number of United States and foreign patents and has patent applications pending in the United States and abroad. Certain technology and software has been acquired or is licensed from third parties. The Company also owns a number of trademarks. The Company's patents, trademarks and licenses are viewed as valuable assets to its operations. However, the Company believes that no one patent or group of patents, trademark or license is, in and of itself, essential to the Company such that its loss would materially affect the Company's business as a whole.

Environmental Matters and Climate Change

The Company is subject to federal, state and local laws, regulations and ordinances that (i) govern activities or operations that may have adverse environmental effects, such as discharges to air and water as well as handling and disposal practices for solid and hazardous wastes, and (ii) impose liability for the costs of cleaning up and certain damages resulting from sites of past spills, disposals or other releases of hazardous substances. The Company believes that it currently conducts its operations and has operated its business in the past in substantial compliance with applicable environmental laws. From time to time, Company operations have resulted or may result in noncompliance with environmental laws or liability for cleanup pursuant to environmental laws. The Company does not currently anticipate any material adverse effect on its operations, financial condition or competitive position as a result of its efforts to comply with environmental laws.

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The Company is sensitive to the growing global debate with respect to climate change. An internal sustainability working group develops increasingly robust data with respect to the Company's utilization of carbon producing substances in an effort to continuously reduce the Company's carbon footprint. In 2014, the Company published a sustainability report identifying the various actions and behaviors the Company has adopted concerning its commitment to both the environment and the broader topic of social responsibility. See Item 1A, Risk Factors — *The effects of climate change could harm the Company's business*, for more information on the potential significance of climate change legislation. See also Note 16 in the Notes to the Consolidated Financial Statements for financial information about geographic areas.

Available Information

The Company files or furnishes all required reports with the SEC. The public may read and copy any materials the Company files or furnishes with the SEC at the SEC's Public Reference Room at 100 F Street, N.E., Washington, DC 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

The Company is an electronic filer and the SEC maintains a website that contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. The address of the SEC electronic filing website is <http://www.sec.gov>. The Company also makes available, free of charge on its website, its annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and any amendments to those reports as soon as reasonably practicable after such material is electronically filed with or furnished to the SEC. The website address for Waters Corporation is <http://www.waters.com> and SEC filings can be found under the caption "Investors".

Forward-Looking Statements

Certain of the statements in this Form 10-K and the documents incorporated herein, may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), with respect to future results and events, including any statements regarding, among other items, anticipated trends or growth in the Company's business, including, but not limited to, the impact of foreign currency translation on financial results; development of products by acquired businesses; the growth rate of sales and research and development expenses; the impact of costs associated with developing new technologies and bringing these new technologies to market; the impact of new product launches and the associated costs, such as the amortization expense related to software platforms; geographic sales mix of business; development of products by acquired businesses and the amount of contingent payments to the sellers of an acquired business; anticipated expenses, including interest expense, capitalized software costs and effective tax rates; the impact of the newly enacted tax reform in the U.S.; the impact and outcome of the Company's various ongoing tax audit examinations; the achievement of contractual milestones to preserve foreign tax rates; the impact and outcome of litigation matters; the impact of the loss of intellectual property protection; the impact of new accounting standards and pronouncements; the adequacy of the Company's supply chain and manufacturing capabilities and facilities; the impact of regulatory compliance; the Company's expected cash flow, borrowing capacity, debt repayment and refinancing; the Company's ability to fund working capital, capital expenditures, service debt, repay outstanding lines of credit, make authorized share repurchases, fund potential acquisitions and pay any adverse litigation or tax audit liabilities, particularly in the U.S.; future impairment charges; the Company's contributions to defined benefit plans; the Company's expectations regarding changes to its financial position; compliance with applicable environmental laws; and the impact of recent acquisitions on sales and earnings.

Many of these statements appear, in particular, under the heading "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of this Form 10-K. Statements that are not statements of historical fact may be deemed forward-looking statements. You can identify these forward-looking statements by the use of the words "feels", "believes", "anticipates", "plans", "expects", "may", "will", "would",

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“intends”, “suggests”, “appears”, “estimates”, “projects”, “should” and similar expressions, whether in the negative or affirmative. These statements are subject to various risks and uncertainties, many of which are outside the control of the Company, including, and without limitation:

- Foreign currency exchange rate fluctuations that could adversely affect translation of the Company’s future sales, financial operating results and the condition of its non-U.S. operations, especially when a currency weakens against the U.S. dollar.
- Current global economic, sovereign and political conditions and uncertainties, particularly regarding the effect of the U.K. voting to exit the European Union as well as the Chinese government’s ongoing tightening of restrictions on procurement by government-funded customers; the Company’s ability to access capital and maintain liquidity in volatile market conditions; changes in timing and demand by the Company’s customers and various market sectors, particularly if they should reduce capital expenditures or are unable to obtain funding, as in the cases of governmental, academic and research institutions; the effect of mergers and acquisitions on customer demand; and the Company’s ability to sustain and enhance service.
- Negative industry trends; changes in the competitive landscape as a result of changes in ownership, mergers and continued consolidation among the Company’s competitors; introduction of competing products by other companies and loss of market share; pressures on prices from customers or resulting from competition; regulatory, economic and competitive obstacles to new product introductions; lack of acceptance of new products; expansion of our business in developing markets; spending by certain end-markets; ability to obtain alternative sources for components and modules; and the possibility that future sales of new products related to acquisitions, which trigger contingent purchase payments, may exceed the Company’s expectations.
- Increased regulatory burdens as the Company’s business evolves, especially with respect to the FDA and EPA, among others, as well as regulatory, environmental and logistical obstacles affecting the distribution of the Company’s products, completion of purchase order documentation by our customers and ability of customers to obtain letters of credit or other financing alternatives.
- Risks associated with lawsuits, particularly involving claims for infringement of patents and other intellectual property rights.
- The impact and costs incurred from changes in accounting principles and practices, such as the recently adopted accounting pronouncement regarding employee share-based payments; the impact and costs of changes in statutory or contractual tax rates in jurisdictions in which the Company operates, specifically as it relates to the newly enacted tax reform in the U.S.; shifts in taxable income among jurisdictions with different effective tax rates; and the outcome of and costs associated with ongoing and future tax audit examinations or changes in respective country legislation affecting the Company’s effective rates.

Certain of these and other factors are further described below in Item 1A, Risk Factors, of this Form 10-K. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements, whether because of these factors or for other reasons. All forward-looking statements speak only as of the date of this annual report on Form 10-K and are expressly qualified in their entirety by the cautionary statements included in this report. Except as required by law, the Company does not assume any obligation to update any forward-looking statements.

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Item 1A: Risk Factors

The Company is subject to risks common to companies in the analytical instrument industry, including, but not limited to, the following:

The Company's international operations may be negatively affected by political events, wars or terrorism and regulatory changes, related to either a specific country or a larger region. These potential political, currency and economic disruptions, as well as foreign currency exchange rate fluctuations, could have a material adverse effect on the Company's results of operations or financial condition.

Approximately 71% and 69% of the Company's net sales in 2017 and 2016, respectively, were outside of the United States and were primarily denominated in foreign currencies. In addition, the Company has considerable manufacturing operations in Ireland and the United Kingdom, as well as significant subcontractors located in Singapore. As a result, a significant portion of the Company's sales and operations are subject to certain risks, including adverse developments in the political, regulatory and economic environment, in particular, uncertainty regarding possible changes to foreign and domestic trade policy; the effect of the U.K. voting to exit the European Union as well as the financial difficulties and debt burden experienced by a number of European countries; the instability and potential impact of war or terrorism; the instability and possible dissolution of the Euro as a single currency; sudden movements in a country's foreign exchange rates due to a change in a country's sovereign risk profile or foreign exchange regulatory practices; tariffs and other trade barriers; difficulties in staffing and managing foreign operations; and associated adverse operational, contractual and tax consequences.

Additionally, the U.S. dollar value of the Company's net sales, cost of sales, operating expenses, interest, taxes and net income varies with foreign currency exchange rate fluctuations. Significant increases or decreases in the value of the U.S. dollar relative to certain foreign currencies, particularly the Euro, Japanese yen and British pound, could have a material adverse effect or benefit on the Company's results of operations or financial condition.

Global economic conditions may decrease demand for the Company's products and harm the Company's financial results.

The Company is a global business that may be adversely affected by changes in global economic conditions. These changes in global economic conditions, both inside and outside the U.S., may affect the demand for the Company's products and services. This may result in a decline in sales in the future, increased rate of order cancellations or delays, increased risk of excess or obsolete inventories, longer sales cycles and potential difficulty in collecting sales proceeds. There can be no assurance regarding demand for the Company's products and services in the future.

The Company's financial results are subject to changes in customer demand, which may decrease for a number of reasons, many beyond the Company's control.

The demand for the Company's products is dependent upon the size of the markets for its LC, LC-MS, thermal analysis, rheometry and calorimetry products; the timing and level of capital spending and expenditures of the Company's customers; changes in governmental regulations, particularly affecting drug, food and drinking water testing; funding available to governmental, academic and research institutions; general economic conditions and the rate of economic growth in the Company's major markets; and competitive considerations. The Company typically experiences an increase in sales in its fourth quarter as a result of purchasing habits for capital goods by customers that tend to exhaust their spending budgets by calendar year end. There can be no assurance that the Company's results of operations or financial condition will not be adversely impacted by a change in any of the factors listed above or the continuation of uncertain global economic conditions.

Additionally, the analytical instrument market may, from time to time, experience low sales growth. Approximately 56% of the Company's net sales in both 2017 and 2016 were to the worldwide pharmaceutical

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and biotechnology industries, which may be periodically subject to unfavorable market conditions and consolidations. Unfavorable industry conditions could have a material adverse effect on the Company's results of operations or financial condition.

Disruption in worldwide financial markets could adversely impact the Company's access to capital and financial condition.

Financial markets in the U.S., Europe and Asia have experienced times of extreme disruption in recent years, including, among other things, sharp increases in the cost of new capital, credit rating downgrades and bailouts, severely diminished capital availability and severely reduced liquidity in money markets. Financial and banking institutions have also experienced disruptions, resulting in large asset write-downs, higher costs of capital, rating downgrades and reduced desire to lend money. There can be no assurance that there will not be future deterioration or prolonged disruption in financial markets or financial institutions. Any future deterioration or prolonged disruption in financial markets or financial institutions in which the Company participates may impair the Company's ability to access its existing cash, utilize its existing syndicated bank credit facility funded by such financial institutions, and impair its ability to access sources of new capital. The cost to the Company of any new capital raised and interest expense would increase if this were to occur.

Competitors may introduce more effective or less expensive products than the Company's, which could result in decreased sales. The competitive landscape may transform as a result of potential changes in ownership, mergers and continued consolidations among the Company's competitors, which could harm the Company's business.

The analytical instrument market and, in particular, the portion related to the Company's HPLC, UPLC, LC-MS, thermal analysis, rheometry and calorimetry product lines, is highly competitive and subject to rapid changes in technology. The Company encounters competition from several international instrument suppliers and other companies in both domestic and foreign markets. Some competitors have instrument businesses that are generally more diversified than the Company's business, but are typically less focused on the Company's chosen markets. Over the years, some competitors have merged with other competitors for various reasons, some of which include increasing product line offerings, improving market share and reducing costs. There can be no assurance that the Company's competitors will not introduce more effective and less costly products than those of the Company or that the Company will be able to increase its sales and profitability from new product introductions. There can be no assurance that the Company's sales and marketing forces will compete successfully against the Company's competitors in the future.

Strategies for organic growth require developing new technologies and bringing these new technologies to market, which could negatively impact the Company's financial results.

The Company is in the process of developing new products with recently acquired technologies. The future development of these new products will require a significant amount of spending over the next few years before significant, robust sales will be realized. These new products will be sold into both the clinical and non-clinical markets, and any new products requiring FDA clearance may take longer to bring to market. There can be no assurance given as to the timing of these new product launches and the ultimate realization of sales and profitability in the future.

In addition, despite testing prior to the release and throughout the lifecycle of a product or service, the Company's software or hardware may contain coding or manufacturing errors that could impact their function, performance and security, and result in other negative consequences. The detection and correction of any errors in released software or hardware can be time consuming and costly. This could delay the development or release of new products or services, or new versions of products or services, create security vulnerabilities in the Company's products or services, and adversely affect market acceptance of products or services. If the Company experiences errors or delays in releasing its software or hardware, or new versions thereof, its sales could be affected and revenues could decline. Errors in software or hardware could expose the Company to product liability, performance and warranty claims as well as harm to brand and reputation, which could impact future sales.

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Disruption of operations at the Company's manufacturing facilities could harm the Company's financial condition.

The Company manufactures LC instruments at facilities in Milford, Massachusetts and through a subcontractor in Singapore; precision chemistry separation columns at its facilities in Taunton, Massachusetts and Wexford, Ireland; MS products at its facilities in Wilmslow, England, Solihull, England and Wexford, Ireland; thermal analysis and rheometry products at its facilities in New Castle, Delaware and other instruments and consumables at various other locations as a result of the Company's acquisitions. Any prolonged disruption to the operations at any of these facilities, whether due to labor difficulties, destruction of or damage to any facility or other reasons, could have a material adverse effect on the Company's results of operations or financial condition.

The loss of key members of management and the risks inherent in succession planning could adversely affect the Company's results of operations or financial condition.

The operation of the Company requires managerial and operational expertise. None of the Company's key management employees, with the exception of the President and Chief Executive Officer and the Senior Vice President and Chief Financial Officer, have an employment contract with the Company and there can be no assurance that such individuals will remain with the Company. If, for any reason, other such key personnel do not continue to be active in management, the Company's results of operations or financial condition could be adversely affected.

Failure to adequately protect intellectual property could have materially adverse effects on the Company's results of operations or financial condition.

The Company vigorously protects its intellectual property rights and seeks patent coverage on all developments that it regards as material and patentable. However, there can be no assurance that any patents held by the Company will not be challenged, invalidated or circumvented or that the rights granted thereunder will provide competitive advantages to the Company. Conversely, there could be successful claims against the Company by third-party patent holders with respect to certain Company products that may infringe the intellectual property rights of such third parties. The Company's patents, including those licensed from others, expire on various dates. If the Company is unable to protect its intellectual property rights, it could have an adverse and material effect on the Company's results of operations or financial condition.

The Company's business would suffer if the Company were unable to acquire adequate sources of supply.

Most of the raw materials, components and supplies purchased by the Company are available from a number of different suppliers; however, a number of items are purchased from limited or single sources of supply and disruption of these sources could have, at a minimum, a temporary adverse effect on shipments and the financial results of the Company. A prolonged inability to obtain certain materials or components could have an adverse effect on the Company's financial condition or results of operations and could result in damage to its relationships with its customers and, accordingly, adversely affect the Company's business.

The Company's sales would deteriorate if the Company's outside contractors fail to provide necessary components or modules.

Certain components or modules of the Company's LC and MS instruments are manufactured by outside contractors, including the manufacturing of LC instrument systems and related components by contract manufacturing firms in Singapore. Disruptions of service by these outside contractors could have an adverse effect on the supply chain and the financial results of the Company. A prolonged inability to obtain these components or modules could have an adverse effect on the Company's financial condition or results of operations.

The Company's business could be harmed by actions of distributors and other third parties that sell our products.

The Company sells some products through third parties, including distributors and value-added resellers. This exposes us to various risks, including competitive pressure, concentration of sales volumes, credit risks and

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compliance risks. We may rely on one or a few key distributors for a product or market and the loss of these distributors could reduce our revenue or net earnings. Distributors may also face financial difficulties, including bankruptcy, which could hamper our collection of accounts receivable. Violations of the U.S. Foreign Corrupt Practices Act (“FCPA”), the U.K. Bribery Act or similar anti-bribery laws by distributors or other third-party intermediaries could materially impact our business. Risks related to our use of distributors may reduce sales, increase expenses and weaken our competitive position.

The Company may be harmed by improper conduct of any of our employees, agents or business partners.

We cannot provide assurance that our internal controls and compliance systems will always protect the Company from acts committed by employees, agents or business partners that would violate domestic and international laws, including laws governing payments to government officials, bribery, fraud, kickbacks and false claims, pricing, sales and marketing practices, conflicts of interest, competition, export and import compliance, money laundering and data privacy. In particular, the FCPA, the U.K. Bribery Act and similar anti-bribery laws generally prohibit companies and their intermediaries from making improper payments to government officials for the purpose of obtaining or retaining business, and we operate in many parts of the world that have experienced governmental corruption to some degree. Any such improper actions or allegations of such acts could damage our reputation and subject us to civil or criminal investigations in the U.S. and in other jurisdictions and related shareholder lawsuits, could lead to substantial civil and criminal, monetary and non-monetary penalties and could cause us to incur significant legal and investigatory fees. In addition, the government may seek to hold us liable as a successor for violations committed by companies in which we invest or that we acquire. We also rely on our suppliers to adhere to our supplier standards of conduct and material violations of such standards of conduct could occur that could have a material effect on our business, reputation and financial statements.

The Company’s financial results are subject to unexpected shifts in pre-tax income between tax jurisdictions, changing application of tax law and tax audit examinations.

The Company is subject to rates of income tax that range from 0% to in excess of 35% in various jurisdictions in which it conducts business. In addition, the Company typically generates a substantial portion of its income in the fourth quarter of each fiscal year. Geographical shifts in income from previous quarters’ projections caused by factors including, but not limited to, changes in volume and product mix and fluctuations in foreign currency translation rates, could therefore have potentially significant favorable or unfavorable effects on the Company’s income tax expense, effective tax rate and results of operations.

Governments in the jurisdictions in which the Company operates implement changes to tax laws and regulations from time to time. Any changes in corporate income tax rates or regulations regarding transfer pricing or repatriation of dividends or capital, as well as changes in the interpretation of existing tax laws and regulations, in the jurisdictions in which the Company operates could adversely affect the Company’s cash flow and lead to increases in its overall tax burden, which would negatively affect the Company’s profitability.

On December 22, 2017, the U.S. enacted legislation informally referred to as the Tax Cuts and Jobs Act (the “2017 Tax Act”). The 2017 Tax Act changed the U.S. tax system to a territorial tax system, including base broadening measures on non-U.S. earnings, whereby historical unremitted, earnings of foreign subsidiaries are deemed to have been repatriated to the U.S. in 2017 regardless of when the assets are actually remitted to the U.S., as well as reducing or eliminating certain domestic deductions and credits and limiting the deductibility of interest expense and executive compensation. Earnings deemed to have been distributed to the U.S. in accordance with the aforementioned 2017 Tax Act deemed distribution rules are subject to a Transition Toll Tax (“Transition Tax”), which is a one-time, mandatory deemed repatriation tax on the accumulated foreign earnings that have not been previously taxed. To the extent those earnings are deemed to have been invested in cash and cash equivalents, they will be taxed at a rate of 15.5%; the remainder of those earnings will be taxed at a rate of 8.0%. As a result, the Company’s historical unremitted foreign earnings were deemed repatriated in 2017 and the Company incurred a \$550 million estimated tax provision, which primarily consisted of an estimated Transition

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Tax, as well as estimated income tax provisions for state and withholding taxes and a provision associated with the remeasurement of the Company's deferred tax assets and liabilities from 35% to the new U.S. corporate income tax rate of 21%. The Transition Tax will be paid over an eight-year period, starting in 2018, and will not accrue interest. The final impact of the 2017 Tax Act may differ from these estimates, due to, among other things, changes in interpretations, analysis and assumptions made by the Company, additional guidance that may be issued by the U.S. Department of the Treasury and tax planning actions that the Company may undertake.

The Company continues to be permanently reinvested in relation to the cumulative historical outside basis difference that is not related to the unremitted earnings that were taxed. We will continue to evaluate our assertions, including intentions and plans, on the cumulative historical outside basis differences, not related to the unremitted earnings that were taxed, in our foreign subsidiaries as of December 31, 2017. In accordance with authoritative guidance issued by the SEC, we expect to finalize our analysis and accounting related to the toll charge, deferred tax assets and liabilities and any remaining outside basis differences in our foreign subsidiaries during the measurement period; however, there can be no assurance given that these amounts will not need to be revised in the future, affecting the future financial condition and results of operations of the Company.

Going forward, the Company estimates that its effective tax rate will increase approximately one to three percentage points in the future; however, there can be no assurance given that the estimated future effective income tax rate increase will not be different and there can be no assurances that it will not have a material impact on the Company's results of operations or financial condition.

The Company has a contractual tax rate in Singapore of 0% through March 2021, based upon the achievement and continued satisfaction of certain operational and financial milestones, which the Company expects to continue to meet. Currently, the Company has determined that it is more likely than not to realize the contractual tax rate in Singapore of 0% and has not recognized any uncertain tax benefit in its balance sheet related to the achievement of the contractual milestones in Singapore. In the event that it appears that the milestone targets will not be met, the Company will no longer be entitled to a 0% contractual tax rate benefit on income earned in Singapore dating back to the start date of the agreement (April 1, 2016), at which time all tax benefits previously recorded would be reversed and an income tax charge equal to the statutory tax of 17% on income earned during that period would be recorded.

As a global business, the Company is subject to tax audit examinations in various jurisdictions throughout the world. The Company must manage the cost and disruption of responding to governmental audits, investigation and proceedings, whether or not they have merit. In addition, the impact of the settlement of pending or future tax audit examination could have an unfavorable effect on the Company's income tax expense, effective tax rate and results of operations.

The Company's financial condition and results of operations could be adversely affected if the Company is unable to maintain a sufficient level of cash flow.

The Company had \$1,998 million in debt and \$3,394 million in cash, cash equivalents and investments as of December 31, 2017. As of December 31, 2017, the Company also had the ability to borrow an additional \$498 million from its existing, committed credit facility. All but a small portion of the Company's debt was in the U.S. There is a substantial cash requirement in the U.S. to fund operations and capital expenditures, service debt interest obligations, finance potential U.S. acquisitions and continue authorized stock repurchase programs in the U.S. A majority of the Company's cash is generated from foreign operations, with \$3,326 million of the Company's cash, cash equivalents and investments held by foreign subsidiaries. At December 31, 2017, the Company's cash, cash equivalents and investments generated from foreign subsidiaries have effectively been repatriated to the U.S., providing the Company with the ability to access the cash, cash equivalents and investments to satisfy U.S. cash requirements; however, the Company's financial condition and results of operations could still be adversely impacted if the Company is unable to maintain a sufficient level of cash flow to address these requirements through (1) cash from operations, (2) the Company's ability to access its existing

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cash and revolving credit facility, (3) the ability to expand the Company's borrowing capacity and (4) other sources of capital obtained at an acceptable cost.

Debt covenants, and the Company's failure to comply with them, could negatively impact the Company's capital and financial results.

The Company's debt is subject to restrictive debt covenants that limit the Company's ability to engage in certain activities that could otherwise benefit the Company. These debt covenants include restrictions on the Company's ability to enter into certain contracts or agreements, which may limit the Company's ability to make dividend or other payments, secure other indebtedness, enter into transactions with affiliates and consolidate, merge or transfer all or substantially all of the Company's assets. The Company is also required to meet specified financial ratios under the terms of the Company's debt agreements. The Company's ability to comply with these financial restrictions and all other covenants is dependent on the Company's future performance, which is subject to, but not limited to, prevailing economic conditions and other factors, including factors that are beyond the Company's control, such as foreign exchange rates, interest rates, changes in technology and changes in the level of competition. As of December 31, 2017, the Company was in compliance with all debt covenants.

Disruption, cyber attack or unforeseen problems with the security, maintenance or upgrade of the Company's information and web-based systems could have an adverse effect on the Company's operations and financial condition.

The Company relies on its technology infrastructure and that of its software and banking partners, among other functions, to interact with suppliers, sell products and services, fulfill contract obligations, ship products, collect and make electronic wire and check based payments and otherwise conduct business. The Company's technology infrastructure may be vulnerable to damage or interruption from, but not limited to, natural disasters, power loss, telecommunication failures, terrorist attacks, computer viruses, unauthorized access to customer or employee data, unauthorized access to and funds transfers from Company bank accounts and other attempts to harm the Company's systems. Any prolonged disruption to the Company's technology infrastructure, at any of its facilities, could have a material adverse effect on the Company's results of operations or financial condition.

If the Company's security measures are compromised or fail to adequately protect its technology infrastructure, research and development efforts or manufacturing operations, the Company's products and services may be perceived as vulnerable or unreliable, the information the Company's controls and processes may be subject to unauthorized access, acquisition or modification, the Company's brand and reputation could be damaged, the services that the Company provides to its customers could be disrupted, and customers may stop using the Company's products and services, all of which could reduce the Company's revenue and earnings, increase its expenses and expose the Company to legal claims and regulatory actions.

The Company is in the business of designing, manufacturing, selling and servicing analytical instruments to life science, pharmaceutical, biochemical, industrial, nutritional safety, and environmental, academic and governmental customers working in research and development, quality assurance and other laboratory applications, and the Company is also a developer and supplier of software-based products that support instrument systems. Many of the Company's customers are in highly regulated industries. While the Company has invested time and resources implementing measures designed to protect the integrity and security of its technology infrastructure, research and development processes, manufacturing operations, products and services, and the internal and external data managed by the Company, there is a risk these measures will be defeated or compromised or that they are otherwise insufficient to protect against existing or emerging threats. The Company also has acquired companies, products, services and technologies over time and may inherit risk when integrating these acquisitions into the Company. In addition, at times, the Company faces attempts by third parties to defeat its security measures or exploit vulnerabilities in its systems. These risks will increase as the Company continues to grow and expand geographically, and its systems, products and services become increasingly digital and sensor- and web-based.

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The Company could suffer significant damage to its brand and reputation if a security incident resulted in unauthorized access to, acquisition of, or modification to the Company's technology infrastructure, research and development processes, manufacturing operations, its products and services as well as the internal and external data managed by the Company. Such an incident could disrupt the Company's operations and customers could lose confidence in the Company's ability to deliver quality and reliable products or services. This could negatively impact sales and could increase costs related to fixing and addressing these incidents and any vulnerabilities exposed by them, as well as to lawsuits, regulatory investigations, claims or legal liability including contractual liability, costs and expenses owed to customers and business partners.

Compliance failures could harm the Company's business.

The Company is subject to regulation by various federal, state and foreign governments and agencies in areas including, among others, health and safety, import/export, privacy and data protection, FCPA and environmental laws and regulations. A portion of the Company's operations are subject to regulation by the FDA and similar foreign regulatory agencies. These regulations are complex and govern an array of product activities, including design, development, labeling, manufacturing, promotion, sales and distribution. Any failure by the Company to comply with applicable governmental regulations could result in product recalls, the imposition of fines, restrictions on the Company's ability to conduct or expand its operations or the cessation of all or a portion of its operations.

Regulators globally are increasingly imposing greater fines and penalties for privacy and data protection violations, and the European Union has enacted a broad data protection regulation with fines based on a percentage of global revenues. Changes in laws or regulations associated with enhanced protection of certain sensitive types of personal information, such as information related to health, could greatly increase the cost of compliance and the cost of providing the Company's products or services. Any failure, or perceived failure, by the Company to comply with laws and regulations on privacy, data security or consumer protection, or other policies, public perception, standards, self-regulatory requirements or legal obligations, could result in lost or restricted business, proceedings, actions or fines brought against the Company or levied by governmental entities or others, or could otherwise adversely affect the business and harm the Company's reputation.

Some of the Company's operations are subject to domestic and international laws and regulations with respect to the manufacturing, handling, use or sale of toxic or hazardous substances. This requires the Company to devote substantial resources to maintain compliance with those applicable laws and regulations. If the Company fails to comply with such requirements in the manufacturing or distribution of its products, it could face civil and/or criminal penalties and potentially be prohibited from distributing or selling such products until they are compliant.

Some of the Company's products are also subject to the rules of certain industrial standards bodies, such as the International Standards Organization. The Company must comply with these rules, as well as those of other agencies, such as the United States Occupational Safety and Health Administration. Failure to comply with such rules could result in the loss of certification and/or the imposition of fines and penalties, which could have a material adverse effect on the Company's operations.

As a publicly-traded company, the Company is subject to the rules of the SEC and the New York Stock Exchange. In addition, the Company must comply with the Sarbanes-Oxley rules, which require the Company to establish and maintain adequate internal control over financial reporting. The Company's efforts to comply with such laws and regulations are time consuming and costly. While we continue to enhance our controls, we cannot be certain that we will be able to prevent future significant deficiencies or material weaknesses. Failure to comply with such rules or having inadequate internal controls could have a material adverse effect on the Company's financial condition and operations, which could cause investors to lose confidence in our reported financial information and could have a negative effect on the trading price of our stock and our access to capital.

The Company is subject to the rules of the SEC under the Dodd-Frank Wall Street Reform and Consumer Protection Act, requiring disclosure as to whether certain materials (tantalum, tin, gold and tungsten), known as

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conflict minerals, which may be contained in the Company's products, are mined from the Democratic Republic of the Congo and adjoining countries. In 2016, the Company was not able to determine with certainty the country of origin of some of the conflict minerals in its manufactured products. However, the Company does not have knowledge that any of its conflict minerals originated from the Democratic Republic of the Congo or adjoining countries. The Company is in the process of evaluating its 2017 supply chain, and the Company plans to file its 2017 Form SD with the SEC in May 2018. The results of this and future evaluations may impose additional costs and may introduce new risks related to the Company's ability to verify the origin of any conflict minerals contained in its products.

The Company's financial condition and results of operations could be adversely affected by changes to the Company's retirement plans or retirement plan assets.

The Company sponsors various retirement plans, both inside and outside the U.S. Any changes in regulations made by governments in countries in which the Company sponsors retirement plans could adversely impact the Company's cash flows or results of operations. In connection with these retirement plans, the Company is exposed to market risks associated with changes in the various capital markets. For example, changes in long-term interest rates affect the discount rate that is used to measure the Company's retirement plan obligations and related expense. In addition, changes in the market value of investments held by the retirement plans could materially impact the funded status of the retirement plans, and affect the related pension expense and level and timing of contributions required under applicable laws.

Estimates and assumptions made in accounting for the Company's results from operations are dependent on future results, which involve significant judgments and may be imprecise and may differ materially from actual results.

The preparation of consolidated financial statements in conformity with generally accepted accounting principles requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities at the dates of the financial statements. These estimates and assumptions must be made due to certain information used in preparation of our financial statements which is dependent on future events, cannot be calculated with a high degree of precision from data available or is not capable of being readily calculated based on generally accepted methodologies. The Company believes that the accounting related to revenue recognition, product returns and allowances, bad debts, inventory valuation, goodwill and intangible assets, income taxes, warranty and installation provisions, litigation, retirement plan obligations, stock-based compensation, equity investments, business combinations and asset acquisitions, uncertain tax positions and contingencies involves significant judgments and estimates. Actual results for all estimates could differ materially from the estimates and assumptions used, which could have a material adverse effect on our financial condition and results of operations.

The effects of climate change could harm the Company's business.

The Company's manufacturing processes for certain of its products involve the use of chemicals and other substances that are regulated under various international, federal, state and local laws governing the environment. In the event that any future climate change legislation would require that stricter standards be imposed by domestic or international environmental regulatory authorities with respect to the use and/or levels of possible emissions from such chemicals and/or other substances, the Company may be required to make certain changes and adaptations to its manufacturing processes. Any such changes could have a material adverse effect on the financial statements of the Company.

Another potential effect of climate change is an increase in the severity of global weather conditions. The Company's manufacturing facilities are located in the United States, United Kingdom, Ireland and Germany. In addition, the Company manufactures a growing percentage of its HPLC, UPLC and MS products in both Singapore and Ireland. Severe weather and geological conditions or events, including earthquakes, hurricanes and/or tsunamis, could potentially cause significant damage to the Company's manufacturing facilities in each of

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these countries. The effects of such damage and the resulting disruption of manufacturing operations and the impact of lost sales could have a material adverse impact on the financial results of the Company.

Item 1B: Unresolved Staff Comments

None.

Item 2: Properties

Waters Corporation operates 21 United States facilities and 73 international facilities, including field offices. The Company believes its facilities are suitable and adequate for its current production level and for reasonable growth over the next several years. The Company's primary facilities are summarized in the table below.

Primary Facility Locations

Location	Function (1)	Owned/Leased
Golden, CO	M, R, S, D, A	Leased
New Castle, DE	M, R, S, D, A	Owned
Milford, MA	M, R, S, A	Owned
Taunton, MA	M, R	Owned
Wakefield, MA	M, R, S, D, A	Leased
Eden Prairie, MN	M, R, S, D, A	Leased
Nixa, MO	M, S, D, A	Leased
Sharpsburg, PA	M, R, S, D, A	Leased
Lindon, UT	M, R, S, D, A	Leased
New Castle, England	R, S, D, A	Leased
Solihull, England	M, A	Owned
Wilmslow, England	M, R, S, D, A	Owned
St. Quentin, France	S, A	Leased
Huellhorst, Germany	M, R, S, D, A	Owned
Bochum, Germany	R, S, A	Leased
Budapest, Hungary	R	Leased
Wexford, Ireland	M, R, D, A	Owned
Ede, Netherlands	M, R, S, D, A	Leased
Etten-Leur, Netherlands	S, D, A	Owned
Brasov, Romania	R, A	Leased
Singapore	R, S, D, A	Leased

(1) M = Manufacturing; R = Research; S = Sales and Service; D = Distribution; A = Administration

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The Company operates and maintains 11 field offices in the United States and 61 field offices abroad in addition to sales offices in the primary facilities listed above. The Company's field office locations are listed below.

Field Office Locations (2)

<u>United States</u>	<u>International</u>		
Irvine, CA	Australia	India	Portugal
Pleasanton, CA	Austria	Ireland	Poland
Wood Dale, IL	Belgium	Israel	Puerto Rico
Carmel, IN	Brazil	Italy	Spain
Columbia, MD	Canada	Japan	Sweden
Beverly, MA	Czech Republic	Korea	Switzerland
Durham, NC	Denmark	Malaysia	Taiwan
Morrisville, NC	Finland	Mexico	United Kingdom
Parsippany, NJ	France	Netherlands	
Plymouth Meeting, PA	Germany	Norway	
Bellaire, TX	Hungary	People's Republic of China	

(2) The Company operates more than one field office within certain states and foreign countries.

Item 3: Legal Proceedings

From time to time, the Company and its subsidiaries are involved in various litigation matters arising in the ordinary course of business. The Company believes it has meritorious arguments in its current litigation matters and believes any outcome, either individually or in the aggregate, will not be material to the Company's financial position or results of operations.

Item 4: Mine Safety Disclosures

Not applicable.

EXECUTIVE OFFICERS OF THE REGISTRANT

Officers of the Company are elected annually by the Board of Directors and hold office at the discretion of the Board of Directors. The following persons serve as executive officers of the Company:

Christopher J. O'Connell, 51, has served as a Director of the Company since September 2015, when he assumed the position of President and Chief Executive Officer of the Company. In December 2017, Mr. O'Connell was appointed as the Chairman of the Board of Directors of the Company. Mr. O'Connell served as Executive Vice President and President of Restorative Therapies Group of Medtronic plc from August 2009 to August 2015. From 1994 to August 2009, Mr. O'Connell served in the following positions at Medtronic plc: Senior Vice President and President of Medtronic Diabetes, President of Medtronic Physio-Control, Vice President of Sales and Marketing for the Cardiac Rhythm Management business, Vice President/General Manager of the Patient Management Business, Vice President of Corporate Strategy, Director of Investor Relations and Corporate Development Associate.

Mark T. Beaudouin, 63, was appointed Senior Vice President, General Counsel and Secretary in February 2016 and was Vice President, General Counsel and Secretary of the Company since April 2003. Prior to joining Waters Corporation, he served as Senior Vice President, General Counsel and Secretary of PAREXEL International Corporation, a bio/pharmaceutical services company, from January 2000 to April 2003. Previously, from May 1985 to January 2000, Mr. Beaudouin served in several senior legal management positions, including Vice President, General Counsel and Secretary of BC International, Inc., a development stage biotechnology company, First Senior Vice President, General Counsel and Secretary of J. Baker, Inc., a diversified retail company, and General Counsel and Secretary of GenRad, Inc., a high technology test equipment manufacturer.

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Sherry L. Buck, 54, was appointed Senior Vice President and Chief Financial Officer in January 2017. Previously, Ms. Buck served as the Vice President, Chief Financial Officer of Libbey Inc. since August 2012. From 1993 to 2012, Ms. Buck held several positions at Whirlpool Corporation, including Vice President, Finance/Chief Financial Officer, Global Product and Enterprise Cost Leadership; Vice President, Finance—US; Vice President, Cost Leadership; Vice President, Finance—International; and Vice President, Business Performance Management.

Dr. Michael C. Harrington, 57, was appointed Senior Vice President, Global Markets in February 2016. Dr. Harrington joined Waters Corporation in 1987 and has held several senior positions with Waters Corporation, including Vice President, Europe and Asia Pacific Operations, Senior Director of US Sales Operations, Director of US Chemistry Sales and General Manager of Phase Separations. Prior to joining Waters Corporation, Dr. Harrington held senior sales positions at Celsis, Inc.

Terrance P. Kelly, 55, was appointed Senior Vice President and President, TA Instruments in February 2016. Mr. Kelly has served as President, TA instruments since February 2005. Mr. Kelly started his career in finance and accounting at ICI in 1985. He joined DuPont in 1988. He held various sales and marketing positions with DuPont, and later TA Instruments. Mr. Kelly joined Waters Corporation in 1996, when TA Instruments was acquired.

Ian S. King, 61, was appointed Senior Vice President, Global Products in July 2017. Mr. King joined Waters in 1982 and previously served as Senior Vice President, Instrument Technology; Vice President, Separations Technologies; and Vice President and General Manager of Consumable Division, as well as a variety of scientific and management positions in Waters Corporation's international subsidiaries. Prior to joining Waters Corporation, Mr. King worked at Edinburgh University as a research scientist.

Elizabeth B. Rae, 60, was appointed Senior Vice President, Global Human Resources in February 2016 and was Vice President of Human Resources since October 2005 and Vice President of Worldwide Compensation and Benefits since January 2002. Ms. Rae joined Waters Corporation in January 1996 as Director of Worldwide Compensation. Prior to joining Waters Corporation, she held senior human resources positions in retail, healthcare and financial services companies.

David A. Terricciano, 62, was appointed Senior Vice President, Global Operations in February 2016. Mr. Terricciano previously served as Vice President of Global Operations since August 2001. Prior to joining Waters Corporation, he worked as Vice President and General Manager of Operations for Perkin-Elmer Instruments. Previously, he held a variety of executive positions at Goodrich Aerospace, Honeywell Aerospace and Textron Corporation.

PART II

Item 5: *Market for Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities*

The Company’s common stock is registered under the Exchange Act, and is listed on the New York Stock Exchange under the symbol “WAT”. As of February 16, 2018, the Company had 92 common stockholders of record. The Company has not declared or paid any dividends on its common stock in its past three fiscal years. The Company has not made any sales of unregistered equity securities in the years ended December 31, 2017, 2016 or 2015.

Securities Authorized for Issuance under Equity Compensation Plans

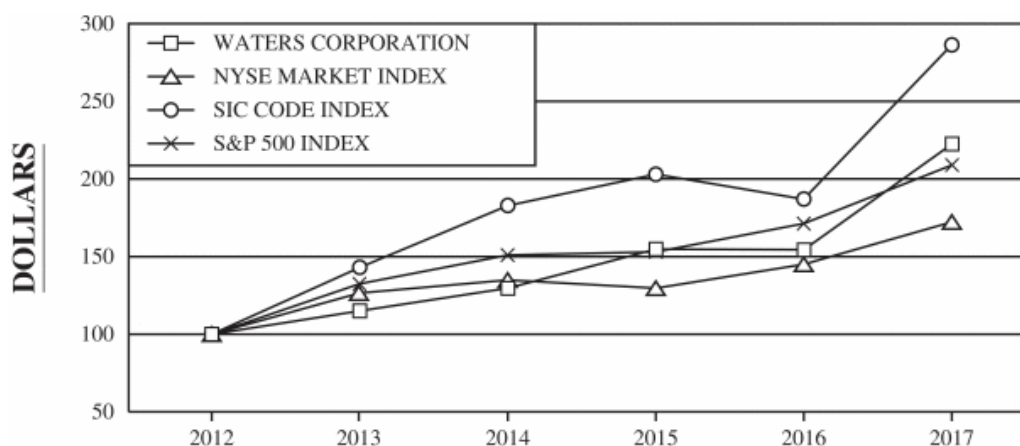
Equity compensation plan information is incorporated by reference from Part III, Item 12, Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters, of this document and should be considered an integral part of this Item 5.

Stock Price Performance Graph

The following performance graph and related information shall not be deemed to be “soliciting material” or to be “filed” with the SEC, nor shall such information be incorporated by reference into any future filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference into such filing.

The following graph compares the cumulative total return on \$100 invested as of December 31, 2012 (the last day of public trading of the Company’s common stock in fiscal year 2012) through December 31, 2017 (the last day of public trading of the common stock in fiscal year 2017) in the Company’s common stock, the NYSE Market Index, the SIC Code 3826 Index, the S&P 500 Index and the S&P Health Care Index. The return of the indices is calculated assuming reinvestment of dividends during the period presented. The Company has not paid any dividends since its IPO. The stock price performance shown on the graph below is not necessarily indicative of future price performance.

**COMPARISON OF CUMULATIVE TOTAL RETURN SINCE DECEMBER 31, 2012
AMONG WATERS CORPORATION, NYSE MARKET INDEX, SIC CODE 3826 INDEX –
LABORATORY ANALYTICAL INSTRUMENTS, S&P 500 INDEX
AND S&P HEALTH CARE INDEX**



	2012	2013	2014	2015	2016	2017
WATERS CORPORATION	\$ 100.00	\$ 114.78	\$ 129.38	\$ 154.48	\$ 154.26	\$ 221.75
NYSE MARKET INDEX	\$ 100.00	\$ 126.28	\$ 134.81	\$ 129.29	\$ 144.73	\$ 171.83
SIC CODE INDEX	\$ 100.00	\$ 142.80	\$ 182.12	\$ 202.31	\$ 186.41	\$ 285.16
S&P 500 INDEX	\$ 100.00	\$ 132.39	\$ 150.51	\$ 152.59	\$ 170.84	\$ 208.14

[Table of Contents](#)**Market for Registrant's Common Equity**

The quarterly range of high and low sales prices for the Company's common stock as reported by the New York Stock Exchange is as follows:

<u>For the Quarter Ended</u>	<u>Price Range</u>	
	<u>High</u>	<u>Low</u>
April 2, 2016	\$133.60	\$112.00
July 2, 2016	\$143.73	\$128.90
October 1, 2016	\$162.53	\$140.76
December 31, 2016	\$160.00	\$133.35
April 1, 2017	\$158.81	\$134.68
July 1, 2017	\$187.65	\$154.15
September 30, 2017	\$190.39	\$171.32
December 31, 2017	\$201.95	\$179.27

Purchases of Equity Securities by the Issuer

The following table provides information about purchases by the Company during the three months ended December 31, 2017 of equity securities registered by the Company under the Exchange Act (in thousands, except per share data):

<u>Period</u>	<u>Total Number of Shares Purchased (1)</u>	<u>Average Price Paid per Share</u>	<u>Total Number of Shares Purchased as Part of Publicly Announced Programs (2)</u>	<u>Maximum Dollar Value of Shares that May Yet Be Purchased Under the Programs (2)</u>
October 1 to October 28, 2017	—	\$ —	—	\$ 885,182
October 28 to November 25, 2017	260	\$196.20	260	\$ 834,170
November 26 to December 31, 2017	182	\$196.65	171	\$ 800,462
Total	<u>442</u>	\$196.39	<u>431</u>	\$ 800,462

- (1) The Company repurchased \$10 million of common stock related to the vesting of restricted stock units during 2017.
- (2) In May 2017, the Company's Board of Directors authorized the repurchase of up to \$1 billion of its outstanding common stock in open market transactions over a three-year period.

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Item 6: Selected Financial Data

The following table sets forth selected historical consolidated financial and operating data for the periods indicated. The statement of operations and balance sheet data is derived from financial statements for the years 2017, 2016, 2015, 2014 and 2013. The Company's financial statements as of December 31, 2017 and 2016, and for each of the three years in the period ended December 31, 2017 are included in Item 8, Financial Statements and Supplementary Data, in Part II of this Form 10-K.

In thousands, except per share and employees data

	2017	2016	2015	2014	2013
STATEMENT OF OPERATIONS DATA:					
Net sales	\$2,309,078	\$2,167,423	\$2,042,332	\$1,989,344	\$1,904,218
Income from operations before income taxes	\$ 641,097	\$ 600,114	\$ 541,919	\$ 490,740	\$ 490,105
Net income*	\$ 20,311	\$ 521,503	\$ 469,053	\$ 431,620	\$ 450,003
Net income per basic common share*	\$ 0.25	\$ 6.46	\$ 5.70	\$ 5.12	\$ 5.27
Weighted-average number of basic common shares	79,793	80,786	82,336	84,358	85,426
Net income per diluted common share*	\$ 0.25	\$ 6.41	\$ 5.65	\$ 5.07	\$ 5.20
Weighted-average number of diluted common shares and equivalents	80,604	81,417	83,087	85,151	86,546
BALANCE SHEET AND OTHER DATA:					
Cash, cash equivalents and investments	\$3,393,701	\$2,813,032	\$2,399,263	\$2,055,388	\$1,803,670
Working capital, including current maturities of debt**	\$3,663,977	\$3,115,124	\$2,649,457	\$2,236,558	\$2,038,100
Total assets**	\$5,324,354	\$4,662,059	\$4,268,677	\$3,874,690	\$3,580,106
Long-term debt**	\$1,897,501	\$1,701,966	\$1,493,027	\$1,237,463	\$1,188,162
Stockholders' equity	\$2,233,788	\$2,301,949	\$2,058,851	\$1,894,666	\$1,763,173
Employees	7,020	6,899	6,594	6,161	5,965

* The provision for income taxes for 2017 includes a \$550 million estimate for the impact of the enactment of the 2017 Tax Act, which was signed into law on December 22, 2017. The \$550 million income tax provision reduced net income per share by \$6.82. The \$550 million income tax provision primarily consists of an estimated Transition Tax as well as estimated income tax provisions for state and withholding taxes and a provision associated with the remeasurement of the Company's deferred tax assets and liabilities from 35% to the new U.S. corporate income tax rate of 21%.

The Company adopted new accounting guidance related to stock-based compensation in 2017. The new accounting guidance requires the excess tax benefits or deficiencies related to stock-based compensation to be reflected in the consolidated statements of operations as a component of the provision for income taxes, whereas they were previously recognized in equity. This aspect of the new accounting guidance was required to be adopted on a prospective basis for the statement of operations and retroactive restatement is not permitted. In 2017, the Company recognized an excess tax benefit, which decreased income tax expense by \$20 million and added \$0.24 to net income per diluted share.

** In 2015, the Company adopted new accounting guidance related to the presentation of debt issuance costs and deferred income taxes, both standards have been applied above retrospectively. Certain debt issuance costs have been reclassified from intangible assets and are presented as a direct deduction from the carrying value of the associated debt. Current deferred tax assets and liabilities have been reclassified as non-current deferred tax assets and liabilities.

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Item 7: Management's Discussion and Analysis of Financial Condition and Results of Operations

Business and Financial Overview

The Company has two operating segments: Waters® and TA®. Waters products and services primarily consist of high performance liquid chromatography ("HPLC"), ultra performance liquid chromatography ("UPLC®" and together with HPLC, referred to as "LC"), mass spectrometry ("MS") and precision chemistry consumable products and related services. TA products and services primarily consist of thermal analysis, rheometry and calorimetry instrument systems and service sales. The Company's products are used by pharmaceutical, biochemical, industrial, nutritional safety, environmental, academic and governmental customers. These customers use the Company's products to detect, identify, monitor and measure the chemical, physical and biological composition of materials and to predict the suitability and stability of fine chemicals, pharmaceuticals, water, polymers, metals and viscous liquids in various industrial, consumer goods and healthcare products.

The Company's operating results are as follows for the years ended December 31, 2017, 2016 and 2015 (dollars in thousands, except per share data):

	Year Ended December 31,			% change	
	2017	2016	2015	2017 vs. 2016	2016 vs. 2015
Revenues:					
Product sales	\$1,552,349	\$1,460,296	\$1,385,256	6%	5%
Service sales	756,729	707,127	657,076	7%	8%
Total net sales	2,309,078	2,167,423	2,042,332	7%	6%
Costs and operating expenses:					
Cost of sales	947,067	891,453	842,672	6%	6%
Selling and administrative expenses	544,703	513,031	495,747	6%	3%
Research and development expenses	132,593	125,187	118,545	6%	6%
Litigation provisions	11,114	3,524	3,939	215%	(11%)
Purchased intangibles amortization	6,743	9,889	10,123	(32%)	(2%)
Acquired in-process research and development	5,000	—	3,855	—	(100%)
Operating income	661,858	624,339	567,451	6%	10%
<i>Operating income as a % of sales</i>	28.7%	28.8%	27.8%		
Interest expense, net	(20,761)	(24,225)	(25,532)	(14%)	(5%)
Income before income taxes	641,097	600,114	541,919	7%	11%
Provision for income taxes	620,786	78,611	72,866	690%	8%
Net income	\$ 20,311	\$ 521,503	\$ 469,053	(96%)	11%
Net income per diluted common share	\$ 0.25	\$ 6.41	\$ 5.65	(96%)	13%

In 2017, the Company's sales increased 7% as compared to 2016. This growth was balanced across all customer and product classes. Instrument system sales increased 6% and 4% in 2017 and 2016, respectively. The increased demand for instrument system sales in 2017 was balanced across our LC-MS and TA instrument systems, while the increase in 2016 was primarily due to LC-MS instrument systems. Recurring revenues (combined sales of precision chemistry consumables and services) increased 7% and 8% in 2017 and 2016, respectively, as a result of a larger installed base of customers and higher billing demand for service sales.

Geographically, the Company experienced 10% sales growth in both Europe and Asia in 2017, while sales in the Americas was flat in 2017 as compared to the previous year. The Americas' sales growth was negatively impacted by natural disasters in the U.S., Mexico and Puerto Rico, as well as weaker customer sentiment in the first half of 2017. Europe's sales growth can be primarily attributed to the increase in customer demand from the improvement in the European economy as well as the effect of foreign currency translation, which added 2% to

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sales growth in 2017. Asia's sales growth was a result of the double-digit sales growth in China and India on strong demand for our products and services in those countries and in spite of lower customer demand in India in the second half of 2017 resulting from the implementation of the new Goods and Services Tax system.

In 2016, the Company's sales grew 6% as compared to 2015, with strong sales in our pharmaceutical and industrial markets, including balance across all product classes. The effect of foreign currency translation increased sales by 1% in 2017 and decreased sales by 1% in 2016 across all products and services. Recent acquisitions had a minimal impact on sales growth in both 2017 and 2016.

Sales to pharmaceutical customers grew 7% and 9% in 2017 and 2016, respectively. These increases were driven by the increasing need for global access to prescription drugs and the testing of newer and more complex biologic drugs. Geographically, the growth within our pharmaceutical market in 2017 was driven by double-digit growth in China, India and Europe, while sales growth in 2016 was driven by double-digit growth in China and Japan.

Combined sales to industrial customers, which includes materials characterization, food, environmental and fine chemical markets, grew 4% and 6% in 2017 and 2016, respectively. The growth in both 2017 and 2016 was driven by recent product introductions and rising global regulatory standards in both food and materials markets. Geographically, industrial market sales growth was highest in China and India in 2017, with modest growth in other regions offset by flat sales in the Americas. In 2016, industrial market sales growth was highest in Europe, followed by Asia and offset by weakness in the U.S.

Combined sales to governmental and academic customers increased 8% in 2017 and decreased 4% in 2016. The increase in sales to governmental and academic customers in 2017 was broad-based across all geographies, with double-digit growth in Europe and the Americas. The decreases in 2016 were a result of these institutions reducing their spending on the Company's products. In 2016, combined sales to governmental and academic customers grew in China and India but declined in all other regions. Sales to governmental and academic customers are highly dependent on when institutions receive funding to purchase our instrument systems and, as such, sales growth rates can vary significantly from period to period.

Operating income was \$662 million in 2017, an increase of 6% as compared to 2016. This increase was primarily a result of the effect of higher sales volume achieved in 2017 being somewhat offset by the impact of \$13 million of severance costs primarily associated with the closure of a facility in Germany and costs associated with providing U.S. employees with an early retirement transition incentive; an \$11 million litigation settlement provision and related costs and a \$5 million charge relating to a milestone payment for the licensing of certain intellectual property relating to mass spectrometry technologies yet to be commercialized. The change in operating income in 2017 as compared with 2016 was also impacted by \$4 million of expense in 2017 related to the acceleration of certain stock awards as compared to \$7 million of similar expense in 2016. Operating income increased 10% in 2016 as compared to 2015 as a result of higher sales volumes achieved in 2016 and the positive impact of foreign currency translation on our U.K. manufacturing and research and development costs as a result of the significantly weaker British Pound.

The provision for income taxes for 2017 includes a \$550 million estimate for the impact of the enactment of the legislation informally referred to as the Tax Cuts and Jobs Act (the "2017 Tax Act"), which was signed into law on December 22, 2017. The 2017 Tax Act changed the U.S. tax system to a territorial system, including base broadening measures requiring the taxation of the Company's historical unremitted foreign earnings through a deemed repatriation, which resulted in a \$550 million income tax provision that reduced net income per share by \$6.82 for the twelve months ended December 31, 2017, as well as eliminating or reducing certain domestic deductions and credits and limiting the deductibility of interest expense and executive compensation. The \$550 million income tax provision primarily consists of an estimated Transition Toll Tax ("Transition Tax") of \$490 million, as well as estimated income tax provisions for state and withholding taxes of \$40 million and a \$20 million provision associated with the remeasurement of the Company's deferred tax assets and liabilities

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from 35% to the new U.S. corporate income tax rate of 21%. The Transition Tax will be paid over an eight-year period, starting in 2018, and will not accrue interest. As a result of the 2017 Tax Act, the Company was able to gain access to its cash and investment balances held outside the U.S. in a tax efficient manner that can be used for any general corporate purposes in the U.S. Going forward, the Company estimates that its effective income tax rate will increase approximately one to three percentage points in the future. The final impact of the 2017 Tax Act may differ from these estimates due to, among other things, changes in interpretations, analysis and assumptions made by the Company, additional guidance that may be issued by the U.S. Department of the Treasury, and tax planning actions that the Company may undertake.

In the first quarter of 2017, the Company adopted a new accounting standard that requires the excess tax benefit or deficiency on stock-based compensation to be included in the statement of operations as a component of the provision for income taxes, whereas previously it was recognized in equity. As a result, the Company recorded a tax benefit on stock-based compensation in 2017 that decreased income tax expense by \$20 million and added \$0.24 to net income per diluted share, respectively. Additionally, this standard required the Company to present the tax benefit in the consolidated statements of cash flows as an operating activity, whereas in the past this tax benefit was reflected as a financing activity. All prior periods presented in the cash flow have been adjusted accordingly.

The Company generated \$698 million, \$643 million and \$573 million of net cash flows from operations in 2017, 2016 and 2015, respectively. The increases in operating cash flow in each year were primarily a result of the increase in sales and operating income. Beginning in 2018, and for the next four years, the Company is required to make annual U.S. federal tax payments of approximately \$40 million to tax authorities in connection with the estimated \$550 million 2017 Tax Act liabilities. The remaining 60% of this liability is required to be paid over a three-year period beginning in 2023. Also as a result of the 2017 Tax Act, the Company is expecting to make \$40 million in state and withholding tax payments during 2018.

Cash flows used in investing activities included capital expenditures related to property, plant, equipment and software capitalization of \$85 million, \$95 million and \$100 million in 2017, 2016 and 2015, respectively. In 2017, the Company made a \$7 million payment for an investment in a developer of analytical system solutions used to make measurements, predict stability and accelerate product discovery in the routine analytic, process monitoring and quality control release processes for life science and biopharmaceutical markets. In addition, the Company made a milestone payment of \$5 million in 2017 to acquire and license intellectual property. In September 2016, the Company acquired Rubotherm GmbH for approximately \$6 million in cash. In February 2018, the Company's Board of Directors approved expanding its precision chemistry consumable manufacturing operations. The Company anticipates spending an estimated \$215 million to build and equip this new state-of-the-art manufacturing facility, which will be paid for with existing cash and investments and the Company does not expect to issue any debt in relation to this expansion.

In November 2017, the Company entered into a new credit agreement (the "2017 Credit Agreement") that provides for a \$1.5 billion revolving facility and a \$300 million term loan. The revolving facility and term loan both mature on November 30, 2022 and require no scheduled prepayments before that date. The Company used \$1.3 billion of the proceeds from the 2017 Credit Agreement to repay the outstanding amounts under the Company's existing multi-borrower credit agreement dated June 2013 (the "2013 Credit Agreement"), which was terminated early without penalty. In May 2017, the Company's Board of Directors authorized the Company to repurchase up to \$1 billion of its outstanding common stock over a three-year period. During 2017, 2016 and 2015, the Company repurchased \$323 million, \$318 million and \$327 million of the Company's outstanding common stock, respectively, under authorized share repurchase programs. The Company believes that it has the financial flexibility to fund these share repurchases given current cash and investment levels and debt borrowing capacity, as well as to invest in research, technology and business acquisitions to further grow the Company's sales and profits, especially now that the 2017 Tax Act provides the Company with access to its offshore cash at much lower income tax rates. As a result, the Company currently anticipates using \$1 billion of cash repatriated into the U.S. to reduce debt and repurchase common stock shares on the open market during 2018.

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Results of Operations

Sales by Geography

Geographic sales information is presented below for the years ended December 31, 2017, 2016 and 2015 (in thousands):

	Year Ended December 31,			% change	
	2017	2016	2015	2017 vs. 2016	2016 vs. 2015
Net Sales:					
United States	\$ 669,274	\$ 665,280	\$ 656,361	1%	1%
Europe	636,472	577,257	555,886	10%	4%
Asia:					
China	387,059	331,354	278,600	17%	19%
Japan	167,258	167,977	145,184	—	16%
Asia Other	308,300	283,653	272,179	9%	4%
Total Asia	862,617	782,984	695,963	10%	13%
Other	140,715	141,902	134,122	(1%)	6%
Total net sales	<u>\$2,309,078</u>	<u>\$2,167,423</u>	<u>\$2,042,332</u>	<u>7%</u>	<u>6%</u>

In 2017, the sales growth in Asia was driven by double-digit increases in China's sales across all product and customer classes. The increase in Asia Other in 2017 was driven by strong sales in India across all product and customer classes. Japan's sales in 2017 were flat as the effect of foreign currency decreased sales by 3%. Japan's sales in 2017 were driven by recurring revenue sales to governmental and academic customers. Europe's sales in 2017 were balanced across all product lines and driven by sales to pharmaceutical, governmental and academic customers. Sales growth in the U.S. in 2017 was driven by TA instrument system sales and recurring revenues. In 2017, sales to the rest of the world were impacted by a decrease in demand from industrial customers resulting from recent natural disasters.

In 2016, sales growth in the U.S. was driven by increases in recurring revenues, which were offset by declines in instrument systems sales. U.S. sales increased to pharmaceutical customers but declined to non-pharmaceutical end-markets. Europe's sales in 2016 were also driven by recurring revenues and primarily due to increases to pharmaceutical and industrial customers. China achieved strong sales growth in all product and customer classes in 2016, with double-digit growth in LC-MS instrument systems and precision chemistry consumables as well as double-digit growth to pharmaceutical customers. Japan's increase in sales in 2016 was largely driven by the benefit of foreign currency translation, which increased sales by 12%. The increase in sales in the rest of Asia in 2016 was driven by LC-MS instrument systems and precision chemistry consumables sales to pharmaceutical and industrial customers. Sales to the rest of Asia decreased 6% due to the negative effect of foreign currency translation. Sales in the rest of the world in 2016 were broad-based across all product classes as sales increased to industrial customers but declined across all other customer classes.

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Waters Products and Services Net Sales

Net sales for Waters products and services are as follows for the years ended December 31, 2017, 2016 and 2015 (in thousands):

	Year Ended December 31,						% change	
	2017	% of Total	2016	% of Total	2015	% of Total	2017 vs. 2016	2016 vs. 2015
Waters instrument systems	\$ 988,750	48%	\$ 943,218	49%	\$ 895,626	50%	5%	5%
Chemistry consumables	372,157	18%	345,413	18%	317,941	17%	8%	9%
Total Waters product sales	1,360,907	66%	1,288,631	67%	1,213,567	67%	6%	6%
Waters service	686,656	34%	639,432	33%	593,301	33%	7%	8%
Total Waters net sales	<u>\$2,047,563</u>	<u>100%</u>	<u>\$1,928,063</u>	<u>100%</u>	<u>\$1,806,868</u>	<u>100%</u>	<u>6%</u>	<u>7%</u>

The increase in Waters instrument system sales (LC and MS technology-based) in both 2017 and 2016 is primarily attributable to higher sales of LC-MS systems that incorporate the Company's tandem quadrupole technologies. Precision chemistry consumables sales increased in both 2017 and 2016 on the uptake in columns and application-specific testing kits. Waters service sales in both 2017 and 2016 benefited from increased sales of service plans and higher service demand billings to a higher installed base of customers. The effect of foreign currency translation had a minimal impact on Waters sales in both 2017 and 2016.

In 2017, Waters sales increased 10% in both Europe and Asia and were flat in the Americas. Waters sales increased 16% in China and were broad-based across all product and customer classes. Waters sales in Japan decreased 1%, primarily due to foreign currency translation, which decreased sales by 3%. Waters sales in the rest of Asia increased 8% and were driven by recurring revenues across all customer classes.

In 2016, Waters sales increased 2% in the U.S., 4% in Europe, 14% in Asia and 5% in the rest of the world. Waters sales increased 21% in China and were broad-based across all product and customer classes. Waters sales in Japan increased 15%, primarily due to the benefit of foreign currency translation, which increased sales by 12%. Waters sales in the rest of Asia increased 6% and were driven by product sales to pharmaceutical and industrial customers, offset by weakness within governmental and academic markets.

TA Product and Services Net Sales

Net sales for TA products and services are as follows for the years ended December 31, 2017, 2016 and 2015 (in thousands):

	Year Ended December 31,						% change	
	2017	% of Total	2016	% of Total	2015	% of Total	2017 vs. 2016	2016 vs. 2015
TA instrument systems	\$191,442	73%	\$171,665	72%	\$171,689	73%	12%	—
TA service	70,073	27%	67,695	28%	63,775	27%	4%	6%
Total TA net sales	<u>\$261,515</u>	<u>100%</u>	<u>\$239,360</u>	<u>100%</u>	<u>\$235,464</u>	<u>100%</u>	<u>9%</u>	<u>2%</u>

TA instrument system sales rebounded across all major product categories after a flat sales growth in 2016. In 2017, TA instrument system sales grew from thermal instrument systems, which were fueled by continued acceptance of the recently introduced Discovery product line. In addition, TA's rheology instrument systems saw strong performance across the entire range of products in the portfolio, driven by the Discovery Hybrid Rheometer and Rubber Rheometer instrument systems. TA service sales increased in both 2017 and 2016 due to sales of service plans and billings to a higher installed base of customers. The effect of foreign currency translation and recent acquisitions had a minimal impact on TA's sales in both 2017 and 2016.

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In 2017, TA sales increased 14% in Asia, 11% in Europe and 5% in the Americas. TA achieved double-digit sales growth in Asia, with the exception of Japan, where a 5% sales growth included a 2% negative impact of foreign currency translation. TA sales in the U.S. in 2017 increased 8%, while the rest of the Americas declined after strong sales in the prior year. In 2016, TA sales increased 2% in both the Americas and Asia and increased 1% in Europe. TA sales were flat in the U.S. in 2016 but TA achieved a double-digit increase in the rest of the Americas. TA's sales in Japan in 2016 increased 19%, with a 10% increase due to the benefit of foreign currency translation.

Cost of Sales

The increase in cost of sales for both 2017 and 2016 were consistent with the increase in sales volumes. The effect of foreign currency translation had a minimal impact on cost of sales in 2017. In 2016, cost of sales included the benefit of a weaker British pound, which reduced the Company's U.K. manufacturing costs when translated into U.S. dollars.

Cost of sales are affected by many factors, including, but not limited to, foreign currency translation, product mix, product costs of instrument systems and amortization of software platforms. At current foreign currency exchange rates, the Company expects that the impact of foreign currency translation may increase sales and still negatively impact gross profit during 2018, as the foreign currency translation benefit expected on Euro and Japanese yen sales would be somewhat mitigated by the unfavorable effect of a stronger British pound on the Company's U.K. manufacturing costs.

Selling and Administrative Expenses

Selling and administrative expenses increased 6% in 2017 and increased 3% in 2016. Selling and administrative expenses in both 2017 and 2016 were impacted by headcount additions and higher merit compensation costs, as well as \$4 million and \$7 million, respectively, of stock compensation expense related to the modification of certain stock awards upon the retirement of senior executives. In 2017, the Company incurred \$13 million of severance costs in connection with the closure of a facility in Germany and an early retirement transition incentive program. Severance-related costs in 2016 and 2015 were \$3 million and \$3 million, respectively, in connection with a reduction in workforce. The effect of foreign currency translation increased selling and administrative expenses by 3% in 2017 and lowered these expenses by 2% in 2016.

As a percentage of net sales, selling and administrative expenses were 23.6%, 23.7% and 24.3% for 2017, 2016 and 2015, respectively.

Research and Development Expenses

Research and development expenses increased 6% in both 2017 and 2016. Research and development expenses in both 2017 and 2016 were impacted by additional headcount, merit compensation and costs associated with new products and the development of new technology initiatives. In addition, the effect of foreign currency translation reduced research and development expenses by 4% and 7% in 2017 and 2016, respectively, primarily due to the weakening of the British pound on the Company's U.K.-based research and development expenses. In 2016, research and development expenses also included a benefit of \$2 million from a government grant.

Acquired In-Process Research and Development

During 2017 and 2015, the Company incurred charges of \$5 million and \$4 million, respectively, for acquired in-process research and development related to milestone payments associated with a licensing arrangement for certain intellectual property relating to mass spectrometry technologies yet to be commercialized and for which there was no future alternative use as of the acquisition date. These licensing arrangements are significantly related to new, biologically-focused applications, as well as other applications, and require the Company to make additional future payments of up to \$7 million if certain milestones are achieved, as well as royalties on future net sales. These future payments may be significant and occur over multiple years.

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Litigation Provision

In 2017, the Company incurred a \$11 million litigation provision related to the issuance of a verdict in a German patent litigation case. In addition, the Company recorded \$4 million of litigation settlement provisions and related costs in both 2016 and 2015.

Interest Expense, Net

The decreases in net interest expense in 2017 and 2016 were primarily attributable to higher income earned on increased cash, cash equivalents and investment balances.

Provision for Income Taxes

The four principal jurisdictions in which the Company manufactures are the U.S., Ireland, the U.K. and Singapore, where the marginal effective tax rates were approximately 37.5%, 12.5%, 19.25% and 0%, respectively, as of December 31, 2017. The Company has a contractual tax rate in Singapore of 0% on qualifying activities in Singapore through March 2021, based upon the achievement of certain contractual milestones, which the Company expects to continue to meet. The current statutory tax rate in Singapore is 17%. The effect of applying the contractual tax rate rather than the statutory tax rate to income from qualifying activities in Singapore increased the Company's net income in 2017, 2016 and 2015 by \$25 million, \$23 million and \$20 million, respectively and increased the Company's net income per diluted share by \$0.31, \$0.29 and \$0.25, respectively.

The Company's effective tax rate is influenced by many significant factors, including, but not limited to, the wide range of income tax rates in jurisdictions in which the Company operates; sales volumes and profit levels in each tax jurisdiction; changes in tax laws, tax rates and policies; the outcome of various ongoing tax audit examinations; and the impact of foreign currency transactions and translation. As a result of variability in these factors, the Company's effective tax rates in the future may not be similar to the effective tax rates for the current or prior years.

The Company's effective tax rates were 96.8%, 13.1% and 13.4% in 2017, 2016 and 2015, respectively. The provision for income taxes for 2017 includes a \$550 million estimate for the impact of the enactment of the 2017 Tax Act. Excluding the \$550 million income tax expense for the 2017 Tax Act, the effective tax rate in 2017 would have been 11.0% and this effective income tax rate includes a \$20 million or (3.1 percentage point) reduction in the income tax expense as a result of the adoption of new accounting guidance related to stock-based compensation. See Note 2 for further information regarding the adoption of this standard.

The 2017 Tax Act changed the U.S. tax system to a territorial system, including base broadening measures requiring the taxation of the Company's historical unremitted foreign earnings through a deemed repatriation, which resulted in a \$550 million income tax provision that reduced net income per share by \$6.82 for the twelve months ended December 31, 2017, as well as eliminating or reducing certain domestic deductions and credits and limiting the deductibility of interest expense and executive compensation. The \$550 million income tax provision primarily consists of an estimated Transition Tax of \$490 million, as well as estimated income tax provisions for state and withholding taxes of \$40 million and a \$20 million provision associated with the remeasurement of the Company's deferred tax assets and liabilities from 35% to the new U.S. corporate income tax rate of 21%. The Transition Tax will be paid over an eight-year period, starting in 2018, and will not accrue interest. The final impact of the 2017 Tax Act may differ from these estimates due to, among other things, changes in interpretations, analysis and assumptions made by the Company, additional guidance that may be issued by the U.S. Department of the Treasury, and tax planning actions that the Company may undertake.

The income tax provision for 2016 included a \$3 million tax benefit related to a release of a valuation allowance on certain net operating loss carryforwards. In 2015, the income tax provision included a \$3 million tax benefit related to the completion of tax audit examinations. The remaining differences between effective tax rates can primarily be attributed to differences in the proportionate amounts of pre-tax income recognized in jurisdictions with different effective tax rates.

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Liquidity and Capital Resources

Condensed Consolidated Statements of Cash Flows (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Net income	\$ 20,311	\$ 521,503	\$ 469,053
Depreciation and amortization	106,002	96,449	89,987
Stock-based compensation	39,436	40,998	33,368
Deferred income taxes	45,510	1,204	6,581
Excess tax benefit related to stock option plans	—	13,844	12,955
Gain on sale of assets	—	(1,500)	(1,377)
In-process research and development and other non-cash charges	5,000	—	4,638
Change in accounts receivable	(24,013)	(31,721)	(49,888)
Change in inventories	731	(20,147)	(19,967)
Change in accounts payable and other current liabilities	3,175	6,842	27,451
Change in deferred revenue and customer advances	10,386	9,974	16,172
Effect of the 2017 Tax Act	530,383	—	—
Other changes	(39,281)	5,474	(15,725)
Net cash provided by operating activities	697,640	642,920	573,248
Net cash used in investing activities	(535,752)	(487,918)	(399,739)
Net cash used in financing activities	(63,869)	(115,701)	(82,549)
Effect of exchange rate changes on cash and cash equivalents	38,669	(21,335)	(25,472)
Increase in cash and cash equivalents	<u>\$ 136,688</u>	<u>\$ 17,966</u>	<u>\$ 65,488</u>

Cash Flow from Operating Activities

Net cash provided by operating activities was \$698 million, \$643 million and \$573 million in 2017, 2016 and 2015, respectively. The changes within net cash provided by operating activities include the following significant changes in the sources and uses of net cash provided by operating activities, aside from the changes in net income:

- The changes in accounts receivable were primarily attributable to timing of payments made by customers and timing of sales. Days sales outstanding was 71 days at December 31, 2017, 2016 and 2015.
- The changes in inventory were primarily attributable to anticipated annual increases in sales volumes, as well as new product launches.
- The changes in accounts payable and other current liabilities were a result of timing of payments to vendors, as well as income tax expenses related to the 2017 Tax Act which are expected to be settled in the next twelve months.
- Net cash provided from deferred revenue and customer advances results from annual increases in new service contracts as a higher installed base of customers renew annual service contracts.
- Other changes were attributable to variation in the timing of various provisions, expenditures, prepaid income taxes and accruals in other current assets, other assets, other liabilities, and income tax expenses related to the 2017 Tax Act.
- In addition, as a result of the adoption of a new accounting standard related to stock-based compensation, the Company reclassified \$14 million and \$13 million of excess tax benefits related to stock-based compensation in 2016 and 2015, respectively, from cash flows from financing activities to cash flows from operating activities.

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Cash Used in Investing Activities

Net cash used in investing activities totaled \$536 million, \$488 million and \$400 million in 2017, 2016 and 2015, respectively. Additions to fixed assets and capitalized software were \$85 million, \$95 million and \$100 million in 2017, 2016 and 2015, respectively. In February 2018, the Company's Board of Directors approved expanding its chemistry synthesis operations. The Company anticipates spending an estimated \$215 million to build and equip this new state-of-the-art manufacturing facility, which will be paid for with existing cash and investments. The Company does not expect to issue any debt in relation to this expansion.

During 2017, 2016 and 2015, the Company purchased \$3.0 billion, \$2.4 billion and \$2.0 billion of investments, respectively, while \$2.5 billion, \$2.0 billion and \$1.7 billion of investments matured, respectively.

During 2017, the Company made a \$7 million payment for an investment in a developer of analytical system solutions used to make measurements, predict stability and accelerate product discovery in the routine analytic, process monitoring and quality control release processes for life science and biopharmaceutical markets. During 2017 and 2015, the Company made payments of \$5 million and \$3 million, respectively, to acquire and license intellectual property relating to mass spectrometry technologies yet to be commercialized. Business acquisitions, net of cash acquired, were \$6 million and \$23 million during 2016 and 2015, respectively. There were no business acquisitions in 2017. In 2016, the Company sold an equity investment for \$4 million and, in 2015, the Company received \$5 million cash from the sale of a building in the U.K.

Cash Used in Financing Activities

In November 2017, the Company entered into the 2017 Credit Agreement, which provides for a \$1.5 billion revolving facility and a \$300 million term loan. The revolving facility and term loan both mature on November 30, 2022 and require no scheduled prepayments before that date. The Company used \$1.3 billion of the proceeds from the 2017 Credit Agreement to repay the outstanding amounts under the 2013 Credit Agreement, which was terminated early without penalty. The Company plans to use future proceeds from the revolving facility for general corporate purposes.

The interest rates applicable to the 2017 Credit Agreement are, at the Company's option, equal to either the alternate base rate (which is a rate per annum equal to the greatest of (a) the prime rate in effect on such day, (b) the Federal Reserve Bank of New York Rate on such day plus 1/2 of 1% per annum and (c) the adjusted LIBO rate on such day (or if such day is not a business day, the immediately preceding business day) for a deposit in U.S. dollars with a maturity of one month plus 1% per annum) or the applicable 1, 2, 3 or 6 month adjusted LIBO rate or EURIBO rate for Euro-denominated loans, in each case, plus an interest rate margin based upon the Company's leverage ratio, which can range between 0 and 12.5 basis points for alternate base rate loans and between 80 and 112.5 basis points for LIBO rate or EURIBO rate loans. The facility fee on the 2017 Credit Agreement ranges between 7.5 and 25 basis points per annum, based on the leverage ratio, of the amount of the revolving facility commitments and the outstanding term loan. The 2017 Credit Agreement requires that the Company comply with an interest coverage ratio test of not less than 3.50:1 as of the end of any fiscal quarter for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, the 2017 Credit Agreement includes negative covenants, affirmative covenants, representations and warranties and events of default that are customary for investment grade credit facilities.

Interest on the Company's fixed rate senior unsecured notes is payable semi-annually each year. Interest on the floating rate senior unsecured notes is payable quarterly. The Company may prepay all or some of the senior unsecured notes at any time in an amount not less than 10% of the aggregate principal amount outstanding, plus the applicable make-whole amount or prepayment premium for Series H and J senior unsecured notes. In the event of a change in control of the Company (as defined in the note purchase agreement), the Company may be required to prepay the senior unsecured notes at a price equal to 100% of the principal amount thereof, plus

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accrued and unpaid interest. These senior unsecured notes require that the Company comply with an interest coverage ratio test of not less than 3.50:1 for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, these senior unsecured notes include customary negative covenants, affirmative covenants, representations and warranties and events of default.

During 2017, 2016 and 2015, the Company's net debt borrowings increased by \$170 million, \$160 million and \$205 million, respectively. As of December 31, 2017, the Company had a total of \$2 billion in outstanding debt, which consisted of \$700 million in outstanding senior unsecured notes, \$300 million borrowed under a term loan and \$1 billion borrowed under a revolving credit facility, with both the term loan and revolving credit facilities under the 2017 Credit Agreement. As of December 31, 2017, the Company had a total amount available to borrow under the 2017 Credit Agreement of \$498 million after outstanding letters of credit. As of December 31, 2017, the Company was in compliance with all debt covenants.

In May 2017, the Company's Board of Directors authorized the Company to repurchase up to \$1 billion of its outstanding common stock over a three-year period. During 2017, 2016 and 2015, the Company repurchased 1.8 million, 2.3 million and 2.6 million shares of the Company's outstanding common stock at a cost of \$323 million, \$318 million and \$327 million, respectively, under the May 2017 authorization and other previously announced programs. As of 2017, the Company had purchased an aggregate of 5.5 million shares at a cost of \$750 million under the May 2014 authorization, which is now completed. At December 31, 2017, the Company had a total of \$800 million in remaining authorized capacity for future repurchases under the May 2017 authorization. In addition, the Company repurchased \$10 million, \$8 million and \$7 million of common stock related to the vesting of restricted stock units during the years ended December 31, 2017, 2016 and 2015, respectively. As a result of the deemed repatriation of the Company's offshore cash from the 2017 Tax Act, the Company currently anticipates deploying approximately \$1 billion of cash to reduce debt and repurchase the Company's common stock shares on the open market during 2018.

The Company received \$98 million, \$62 million and \$52 million of proceeds from the exercise of stock options and the purchase of shares pursuant to the Company's employee stock purchase plan in 2017, 2016 and 2015, respectively.

The Company had cash, cash equivalents and investments of \$3,394 million as of December 31, 2017. The majority of the Company's cash, cash equivalents and investments are generated from foreign operations, with \$3,326 million held by foreign subsidiaries at December 31, 2017, of which \$304 million was held in currencies other than U.S. dollars. The Company believes it has sufficient levels of cash flow and access to its existing cash, cash equivalents and investments to fund operations and capital expenditures, service debt interest, finance potential acquisitions and continue the authorized stock repurchase program in the U.S. These cash requirements are managed by the Company's cash flow from operations, its existing cash, cash equivalents and investments, and the use of the Company's revolving credit facility.

Management believes, as of the date of this report, that its financial position, along with expected future cash flows from earnings based on historical trends and the ability to raise funds from external sources and the borrowing capacity from existing, committed credit facilities, will be sufficient to service debt and fund working capital and capital spending requirements, authorized share repurchase amounts and potential acquisitions for at least the next twelve months. Other than the Company gaining tax efficient access to its offshore cash, cash equivalents and investments as a result of the 2017 Tax Act, there have been no recent significant changes to the Company's financial position, nor are there any anticipated changes, to warrant a material adjustment related to indefinitely reinvested foreign earnings.

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Contractual Obligations and Commercial Commitments

The following is a summary of the Company's known contractual obligations as of December 31, 2017 (in thousands):

	Payments Due by Year (1)							
	Total	2018	2019	2020	2021	2022	2023	After 2023
Notes payable and debt	\$ 100,273	\$100,273	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Interest on senior unsecured notes	112,307	22,523	21,852	17,268	13,580	11,467	10,489	15,128
Long-term debt ⁽²⁾	1,900,000	—	—	100,000	150,000	1,300,000	50,000	300,000
2017 Tax Act liability	530,383	80,000	40,000	40,000	40,000	40,000	74,000	216,383
Operating leases	89,682	23,168	18,228	14,122	8,652	6,220	5,285	14,007
Total	<u>\$2,732,645</u>	<u>\$225,964</u>	<u>\$80,080</u>	<u>\$171,390</u>	<u>\$212,232</u>	<u>\$1,357,687</u>	<u>\$139,774</u>	<u>\$545,518</u>

- (1) Does not include normal purchases made in the ordinary course of business and uncertain tax positions discussed below.
- (2) The interest rates applicable to the 2017 Credit Agreement are, at the Company's option, equal to either the alternate base rate (which is a rate per annum equal to the greatest of (a) the prime rate in effect on such day, (b) the Federal Reserve Bank of New York Rate on such day plus 1/2 of 1% per annum and (c) the adjusted LIBO rate on such day (or if such day is not a business day, the immediately preceding business day) for a deposit in U.S. dollars with a maturity of one month plus 1% per annum) or the applicable 1, 2, 3 or 6 month adjusted LIBO rate or EURIBO rate for Euro-denominated loans, in each case, plus an interest rate margin based upon the Company's leverage ratio, which can range between 0 and 12.5 basis points for alternate base rate loans and between 80 and 112.5 basis points for LIBO rate or EURIBO rate loans. The facility fee on the 2017 Credit Agreement ranges between 7.5 and 25 basis points per annum, based on the leverage ratio, of the amount of the revolving facility commitments and the outstanding term loan. The 2017 Credit Agreement requires that the Company comply with an interest coverage ratio test of not less than 3.50:1 as of the end of any fiscal quarter for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, the 2017 Credit Agreement includes negative covenants, affirmative covenants, representations and warranties and events of default that are customary for investment grade credit facilities. As of December 31, 2017, the Company was in compliance with all such covenants.

The following is a summary of the Company's known commercial commitments as of December 31, 2017 (in thousands):

	Amount of Commitments Expiration Per Period							
	Total	2018	2019	2020	2021	2022	2023	After 2023
Letters of credit	\$1,733	\$1,733	\$—	\$—	\$—	\$—	\$—	\$—

From time to time, the Company and its subsidiaries are involved in various litigation matters arising in the ordinary course of business. The Company believes it has meritorious arguments in its current litigation matters and believes any outcome, either individually or in the aggregate, will not be material to the Company's financial position or results of operations.

The Company has long-term liabilities for deferred employee compensation, including pension and supplemental executive retirement plans. The payments related to the supplemental retirement plan are not included above since they are dependent upon when the employee retires or leaves the Company and whether the employee elects lump-sum or annuity payments. During fiscal year 2018, the Company expects to contribute approximately \$4 million to \$10 million to the Company's defined benefit plans.

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The Company has contingent consideration for an earnout pertaining to the Medimass acquisition. The earnout payments are not included above since they are dependent upon many factors that cannot be predicted with any certainty. The estimated fair value of the contingent consideration as of December 31, 2017 is \$3 million.

The Company licenses certain technology and software from third parties. Future minimum license fees payable under existing license agreements as of December 31, 2017 are immaterial. The Company enters into licensing arrangements with third parties that require future milestone or royalty payments contingent upon future events. Upon the achievement of certain milestones in existing agreements, the Company could make additional future payments of up to \$7 million, as well as royalties on future net sales. It is not possible to predict with reasonable certainty whether these milestones will be achieved or the timing for achievement. As a result, these potential payments are not included in the table above.

The Company accounts for its uncertain tax return reporting positions in accordance with the accounting standards for income taxes, which require financial statement reporting of the expected future tax consequences of uncertain tax reporting positions on the presumption that all concerned tax authorities possess full knowledge of those tax reporting positions, as well as all of the pertinent facts and circumstances, but prohibit any discounting of unrecognized tax benefits associated with those reporting positions for the time value of money. The Company classified interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes. If all of the Company's unrecognized tax benefits accrued as of December 31, 2017 were to become recognizable in the future, the Company would record a total reduction of approximately \$6 million in its income tax provision.

With limited exceptions, the Company is no longer subject to tax audit examinations in significant jurisdictions for the years ended on or before December 31, 2012. However, carryforward tax attributes that were generated in years beginning on or before January 1, 2013 may still be adjusted upon examination by tax authorities if the attributes are utilized. The Company continuously monitors the lapsing of statutes of limitations on potential tax assessments for related changes in the measurement of unrecognized tax benefits, related net interest and penalties, and deferred tax assets and liabilities.

During the year ended December 31, 2016, the Company concluded tax audit disputes outside the U.S. that, in part, related to matters for which the Company had recorded net uncertain tax benefits. The resolution of these tax disputes resulted in a \$1 million reduction in the measurement of its unrecognized tax benefits for the year ended December 31, 2016.

During the year ended December 31, 2015, the Company concluded U.S. tax audit disputes that, in part, related to matters for which the Company had recorded net uncertain tax benefits. The resolution of these tax disputes resulted in a \$2 million reduction in the measurement of its unrecognized tax benefits and a \$2 million decrease in its provision for income taxes for the year ended December 31, 2015.

As of December 31, 2017, the Company expects to record additional reductions in the measurement of its unrecognized tax benefits and related net interest and penalties of approximately \$1 million within the next twelve months due to potential tax audit settlements and the lapsing of statutes of limitations on potential tax assessments. The Company does not expect to record any other material reductions in the measurement of its unrecognized tax benefits within the next twelve months.

The Company has not paid any dividends and has no plans, at this time, to pay any dividends in the future.

Off-Balance Sheet Arrangements

The Company has not created, and is not party to, any special-purpose or off-balance sheet entities for the purpose of raising capital, incurring debt or operating parts of its business that are not consolidated (to the extent

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of the Company's ownership interest therein) into the consolidated financial statements. The Company has not entered into any transactions with unconsolidated entities whereby it has subordinated retained interests, derivative instruments or other contingent arrangements that expose the Company to material continuing risks, contingent liabilities or any other obligation under a variable interest in an unconsolidated entity that provides financing, liquidity, market risk or credit risk support to the Company.

The Company enters into standard indemnification agreements in its ordinary course of business. Pursuant to these agreements, the Company indemnifies, holds harmless and agrees to reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally the Company's business partners or customers, in connection with patent, copyright or other intellectual property infringement claims by any third party with respect to its current products, as well as claims relating to property damage or personal injury resulting from the performance of services by the Company or its subcontractors. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited. Historically, the Company's costs to defend lawsuits or settle claims relating to such indemnity agreements have been minimal and management accordingly believes the estimated fair value of these agreements is immaterial.

Critical Accounting Policies and Estimates

Summary

The preparation of consolidated financial statements requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities. Critical accounting policies are those that are central to the presentation of the Company's financial condition and results of operations that require management to make estimates about matters that are highly uncertain and that would have a material impact on the Company's results of operations given changes in the estimate that are reasonably likely to occur from period to period or use of different estimates that reasonably could have been used in the current period. On an ongoing basis, the Company evaluates its policies and estimates. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual amounts may differ from these estimates under different assumptions or conditions. There are other items within the Company's consolidated financial statements that require estimation, but are not deemed critical as defined above. Changes in estimates used in these and other items could potentially have a material impact on the Company's consolidated financial statements.

Revenue Recognition

Sales of products and services are generally recorded based on product shipment and performance of service, respectively. The Company's deferred revenue on the consolidated balance sheets consists of the obligation on instrument service contracts and customer payments received in advance, prior to shipment of the instrument. At December 31, 2017, the Company had current and long-term deferred revenue liabilities of \$167 million and \$26 million, respectively. Revenue is recognized when all of the following revenue recognition criteria are met: persuasive evidence of an arrangement exists; delivery or performance has occurred; the vendor's fee is fixed or determinable; collectibility is reasonably assured and, if applicable, upon acceptance when acceptance criteria with contractual cash holdback are specified. Shipping and handling costs are included in cost of sales, net of amounts invoiced to the customer per the order.

Product shipments, including those for demonstration or evaluation, and service contracts are not recorded as revenue until a valid purchase order or master agreement is received, specifying fixed terms and prices. The Company generally recognizes product revenue when legal title has transferred and risk of loss passes to the customer. The Company generally structures its sales arrangements as shipping point or international equivalent and, accordingly, recognizes revenue upon shipment. In some cases, destination-based shipping terms are included in sales arrangements, in which cases revenue is generally recognized when the products arrive at the customer site.

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The Company's method of revenue recognition for certain products requiring installation is accounted for in accordance with multiple-element revenue recognition accounting standards. With respect to the installation obligations, the larger of the contractual cash holdback or the best estimate of selling price of the installation service is deferred when the product is shipped and revenue is recognized as a multiple-element arrangement when installation is complete. The Company determines the best estimate of selling price of installation based upon a number of factors, including hourly service billing rates and estimated installation hours.

Instrument service contracts are typically billed at the beginning of the maintenance period. The amount of the service contract is amortized ratably to revenue over the instrument maintenance period. There are no deferred costs associated with the service contract, as the cost of the service is recorded when the service is performed. No revenue is recognized until all revenue recognition criteria have been met.

Sales of standalone software are accounted for in accordance with the accounting standards for software revenue recognition. The Company's software arrangements typically include software licenses and maintenance contracts. Software license revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, collection is probable, and there are no significant post-delivery obligations remaining. The revenue associated with the software maintenance contract is recognized ratably over the maintenance term. Unspecified rights to software upgrades are typically sold as part of the maintenance contract on a when-and-if-available basis. The Company uses the residual method to allocate software revenue when a transaction includes multiple elements and vendor specific objective evidence of fair value of undelivered elements exists. Under the residual method, the fair value of the undelivered element (maintenance) is deferred and the remaining portion of the arrangement fee is allocated to the delivered element (software license) and recognized as revenue.

Returns and customer credits are infrequent and are recorded as a reduction to sales. Rights of return are not included in sales arrangements. Revenue associated with products that contain specific customer acceptance criteria is not recognized before the customer acceptance criteria are satisfied. Discounts from list prices are recorded as a reduction to sales.

Loss Provisions on Accounts Receivable and Inventory

The Company maintains allowances for doubtful accounts for estimated losses resulting from the inability of its customers to make required payments. If the financial condition of the Company's customers were to deteriorate, resulting in an impairment of their ability to make payments, additional allowances may be required. The Company does not request collateral from its customers, but collectibility is enhanced through the use of credit card payments and letters of credit. The Company assesses collectibility based on a number of factors, including, but not limited to, past transaction history with the customer, the credit-worthiness of the customer, industry trends and the macro-economic environment. Historically, the Company has not experienced significant bad debt losses. Sales returns and allowances are estimates of future product returns related to current period revenue. Material differences may result in the amount and timing of revenue for any period if management made different judgments or utilized different estimates for sales returns and allowances for doubtful accounts. The Company's accounts receivable balance at December 31, 2017 was \$534 million, net of allowances for doubtful accounts and sales returns of \$9 million.

The Company values all of its inventories at the lower of cost or net realizable value on a first-in, first-out basis ("FIFO"). The Company estimates revisions to its inventory valuations based on technical obsolescence, historical demand, projections of future demand, including that in the Company's current backlog of orders, and industry and market conditions. If actual future demand or market conditions are less favorable than those projected by management, additional write-downs may be required. The Company's inventory balance at December 31, 2017 was recorded at its net realizable value of \$270 million, which is net of write-downs of \$23 million.

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Long-Lived Assets, Intangible Assets and Goodwill

The Company assesses the impairment of identifiable intangibles, long-lived assets and goodwill whenever events or changes in circumstances indicate that the carrying value may not be recoverable. Factors the Company considers important which could trigger impairment include, but are not limited to, the following:

- significant underperformance relative to historical or projected future operating results, particularly as it pertains to capitalized software and patent costs;
- significant negative industry or economic trends, competitive products and technologies; and
- significant changes or developments in strategic technological collaborations or legal matters which affect the Company's capitalized patents, purchased technology, trademarks and intellectual properties, such as licenses.

When the Company determines that the carrying value of an individual intangible asset, long-lived asset or goodwill may not be recoverable based upon the existence of one or more of the above indicators, an estimate of undiscounted future cash flows produced by that intangible asset, long-lived asset or goodwill, including its eventual residual value, is compared to the carrying value to determine whether impairment exists. In the event that such cash flows are not expected to be sufficient to recover the carrying amount of the asset, the asset is written-down to its estimated fair value. Net intangible assets, long-lived assets and goodwill amounted to \$228 million, \$349 million and \$360 million, respectively, as of December 31, 2017.

The Company performs annual impairment reviews of its goodwill on January 1 of each year. For goodwill impairment review purposes, the Company has two reporting units: Waters and TA. The Company currently does not expect to record an impairment charge in the foreseeable future; however, there can be no assurance that, at the time future reviews are completed, a material impairment charge will not be recorded. The factors that could cause a material goodwill impairment charge in the future include, but are not limited to, the following:

- significant decline in the Company's projected revenue, earnings or cash flows;
- significant adverse change in legal factors or business climate;
- significant decline in the Company's stock price or the stock price of comparable companies;
- adverse action or assessment by a regulator; and
- unanticipated competition.

Income Taxes

As part of the process of preparing the consolidated financial statements, the Company is required to estimate its income taxes in each of the jurisdictions in which it operates. In addition, as a result of the timing of the new 2017 Tax Act in the U.S., the Company has had to make reasonable estimates on certain amounts related to the deemed repatriation of foreign earnings based on the existing interpretations of the U.S. Department of the Treasury and state and local governments. These processes involve the Company estimating its actual current tax exposure, taking into account the amount, timing and character of taxable income, tax deductions and credits and assessing changes in tax laws, regulations, agreements, treaties and any new interpretations on the taxation of the deemed repatriation of foreign earnings. Differing treatment of items for tax and accounting purposes, such as depreciation, amortization and inventory reserves, result in deferred tax assets and liabilities, which are included within the consolidated balance sheets. In the event that actual results differ from these estimates, or the Company adjusts these estimates in future periods, such changes could materially impact the Company's financial position and results of operations.

The accounting standards for income taxes require that a company continually evaluate the necessity of establishing or changing a valuation allowance for deferred tax assets depending on whether it is more likely than not that the actual benefit of those assets will be realized in future periods.

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Uncertain Tax Positions

The Company accounts for its uncertain tax return reporting positions in accordance with the accounting standards for income taxes, which require financial statement reporting of the expected future tax consequences of uncertain tax reporting positions on the presumption that all concerned tax authorities possess full knowledge of those tax reporting positions, as well as all of the pertinent facts and circumstances, but prohibit any discounting of unrecognized tax benefits associated with those reporting positions for the time value of money. The Company classified interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes. At December 31, 2017, the Company had unrecognized tax benefits of \$7 million.

The Company has been granted a 0% contractual tax rate in Singapore that requires the achievement of certain operational and financial milestones that the Company expects to meet, to the extent not already achieved, by December 31, 2020 and maintain through at least March 31, 2021. As part of the Company's determination of uncertain tax positions, the Company regularly assesses its progress against these operational and financial milestone targets to determine whether the milestones can be reasonably achieved. These milestones were negotiated with the Singaporean tax authorities and established based on the Company's historical financial performance; the anticipated customer end-market demand, particularly in certain regions in the world, and the Company's anticipated future operating plans. These assessments require significant judgments and estimates about the Company's ability to meet the milestone targets for the following types of objectives: reaching and maintaining annual revenue and business spending targets; meeting capital expenditures targets; attaining and sustaining employment targets; and establishing a local research and development and service center. The Company regularly monitors its actual and forecasted sales and operating results against these milestones and the Company makes the determination as to whether the future forecasted financial results are most likely to be achieved. These milestones are very similar in nature to the previous Singaporean tax holiday contractual agreements that the Company successfully completed. These milestones are not required to be met until December 21, 2020, at the earliest, which gives the Company sufficient time to make any necessary adjustments to its operating plans to achieve the milestones.

Currently, the Company has determined that it is more likely than not to realize the contractual tax rate in Singapore of 0% and has not recognized an uncertain tax benefit in its balance sheet related to the achievement of the contractual milestones in Singapore. However, these milestones can be significantly influenced by the business climate in Singapore and the Company's overall financial performance and, in the event that the Company determines that the milestone targets are not expected to be met, the Company would no longer be able to record a tax benefit at a 0% contractual tax rate on income earned in Singapore from and after the April 1, 2016 start date of the contract period. At such time, the Company would record an income tax charge on the affected Singapore income earned back to April 1, 2016 at the Singapore statutory tax rate(s) (currently 17%), with a corresponding income tax liability recorded on the balance sheet. For the year ended 2017, the effect of applying the contractual tax rate rather than the statutory tax rate to income from qualifying activities in Singapore increased the Company's net income and net income per diluted share by \$25 million and \$0.31, respectively.

On December 22, 2017, the U.S. enacted the 2017 Tax Act, which changed the U.S. tax system to a territorial tax system, including base broadening measures on non-U.S. earnings, whereby foreign earnings are effectively deemed to be repatriated to the U.S., as well as reducing or eliminating certain domestic deductions and credits and limiting the deductibility of interest expense and executive compensation. Included in the 2017 Tax Act is a Transition Tax, which is a one-time, mandatory deemed repatriation tax on the accumulated foreign earnings that have not been previously taxed. Earnings in the form of cash and cash equivalents will be taxed at a rate of 15.5% and all other earnings will be taxed at a rate of 8.0%. As a result, the Company's historical unremitted foreign earnings were deemed repatriated in 2017 and the Company incurred a \$550 million estimated tax provision, which primarily consisted of an estimated Transition Tax, as well as estimated income tax provisions for state and withholding taxes and a provision associated with the remeasurement of the Company's deferred tax assets and liabilities from 35% to the new U.S. corporate income tax rate of 21%. The Transition Tax will be paid over an eight-year period, starting in 2018, and will not accrue interest. The final

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impact of the 2017 Tax Act may differ from these estimates, due to, among other things, changes in interpretations, analysis and assumptions made by the Company, additional guidance that may be issued by the U.S. Department of the Treasury and tax planning actions that the Company may undertake.

In accordance with guidance in SEC Staff Accounting Bulletin No. 118, the final determination of the Transition Tax and the remeasurement of our deferred assets and liabilities will be completed as additional information becomes available, but no later than one year from the date of enactment of the 2017 Tax Act.

Warranty

Product warranties are recorded at the time revenue is recognized for certain product shipments. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers, the Company's warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. Should actual product failure rates, material usage or service delivery costs differ from the Company's previous estimates, revisions to the estimated warranty liability would be required. At December 31, 2017, the Company's warranty liability was \$13 million.

Litigation

As described in Item 3, Legal Proceedings, of Part I of this Form 10-K, the Company is a party to various pending litigation matters. With respect to each pending claim, management determines whether it can reasonably estimate whether a loss is probable and, if so, the probable range of that loss. If and when management has determined, with respect to a particular claim, both that a loss is probable and that it can reasonably estimate the range of that loss, the Company records a charge equal to either its best estimate of that loss or the lowest amount in that probable range of loss. The Company will disclose additional exposures when the range of loss is subject to considerable uncertainty.

Pension and Other Retirement Benefits

Assumptions used in determining projected benefit obligations and the fair values of plan assets for the Company's pension plans and other retirement benefits are evaluated periodically by management. Changes in assumptions are based on relevant Company data. Critical assumptions, such as the discount rate used to measure the benefit obligations and the expected long-term rate of return on plan assets, are evaluated and updated annually. The Company has assumed that the weighted-average expected long-term rate of return on plan assets will be 6.53% for its U.S. benefit plans and 2.64% for its non-U.S. benefit plans.

At the end of each year, the Company determines the discount rate that reflects the current rate at which the pension liabilities could be effectively settled. The Company utilized Milliman's Bond Matching model to determine the discount rate for its U.S. benefit plans. The Company determined the discount rate for its non-U.S. benefit plans based on the analysis of the Mercer Pension Discount Curve for high quality investments as of December 31, 2017 that best matched the timing of the plan's future cash flows for the period to maturity of the pension benefits. Once the interest rates were determined, the plan's cash flow was discounted at the spot interest rate back to the measurement date. At December 31, 2017, the Company determined the weighted-average discount rate to be 3.94% for the U.S. benefit plans and 1.79% for the non-U.S. benefits plans.

A one-quarter percentage point increase in the assumed long-term rate of return would decrease the Company's net periodic benefit cost for the Waters Retirement Plan by less than \$1 million. A one-quarter percentage point increase in the discount rate would decrease the Company's net periodic benefit cost for the Waters Retirement Plan by less than \$1 million.

Stock-based Compensation

The accounting standards for stock-based compensation require that all share-based payments to employees be recognized in the statements of operations based on their fair values. The Company has used the Black-Scholes

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option pricing model and Monte Carlo simulation model to determine the fair value of its stock option awards and performance stock unit awards, respectively. Under the fair-value recognition provisions of this statement, share-based compensation cost is measured at the grant date based on the value of the award and is recognized as expense over the vesting period. Determining the fair value of share-based awards at the grant date requires judgment, including estimating stock price volatility and employee stock option exercise behaviors. If actual results differ significantly from these estimates, stock-based compensation expense and the Company's results of operations could be materially impacted. As stock-based compensation expense recognized in the consolidated statements of operations is based on awards that ultimately are expected to vest, the amount of the expense has been reduced for estimated forfeitures. These accounting standards require forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures are estimated based on historical experience. If factors change and the Company employs different assumptions in the application of these accounting standards, the compensation expense that the Company records in future periods may differ significantly from what the Company has recorded in the current period. The Company recognizes the expense using the straight-line attribution method.

As of December 31, 2017, unrecognized compensation costs and related weighted-average lives over which the costs will be amortized were as follows (in millions):

	Unrecognized Compensation Costs	Weighted-Average Life in Years
Stock options	\$ 43	3.5
Restricted stock units	34	3.0
Performance stock units	10	2.5
Restricted stock	—	—
Total	<u>\$ 87</u>	3.2

Business Combinations and Asset Acquisitions

The Company accounts for business acquisitions under the accounting standards for business combinations. The results of each acquisition are included in the Company's consolidated results as of the acquisition date and the purchase price of an acquisition is allocated to tangible and intangible assets and assumed liabilities based on their estimated fair values. Any excess of the fair value consideration transferred over the estimated fair values of the net assets acquired is recognized as goodwill. Acquired in-process research and development ("IPR&D") included in a business combination is capitalized as an indefinite-lived intangible asset. Development costs incurred after the acquisition are expensed as incurred and acquired IPR&D is tested for impairment annually until completion of the acquired programs. Upon commercialization, this indefinite-lived intangible asset is then accounted for as a finite-lived intangible asset and amortized on a straight-line basis over its estimated useful life, subject to periodic impairment reviews. If the research and development project is abandoned, the indefinite-lived asset is charged to expense. Legal costs, due diligence costs, business valuation costs and all other business acquisition costs are expensed when incurred.

The Company also acquires intellectual property through licensing arrangements. These arrangements often require upfront payments and may include additional milestone or royalty payments, contingent upon certain future events. IPR&D acquired in an asset acquisition (as opposed to a business combination) is expensed immediately unless there is an alternative future use. Subsequent payments made for the achievement of milestones are evaluated to determine whether they have an alternative future use or should be expensed. Payments made to third parties subsequent to commercialization are capitalized and amortized over the remaining useful life of the related asset, and are classified as intangible assets.

Contingent Consideration

In addition to the initial cash consideration paid to acquire Medimass, the Company is obligated to make additional earnout payments based on a royalty due on future sales of products containing the REIMS

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technology. In accordance with the accounting standards for business combinations, the Company determines the fair value of the liability for contingent consideration at each reporting date using a probability-weighted discounted cash flow model. Subsequent changes in the fair value of the contingent consideration liability are recorded in the results of operations. The fair value of the contingent consideration liability associated with future earnout payments is based on several factors, including estimated future results and a discount rate reflective of the Company's creditworthiness. A change in any of these unobservable inputs can significantly change the fair value of the contingent consideration. Although there is no contractual limit, total future undiscounted contingent consideration payments were estimated to be \$3 million as of December 31, 2017, based on the Company's best estimate, as the earnout is based on future sales of certain products through 2034.

Recent Accounting Standard Changes and Developments

Information regarding recent accounting standard changes and developments is incorporated by reference from Part II, Item 8, Financial Statements and Supplementary Data, of this document and should be considered an integral part of this Item 7. See Note 2 in the Notes to the Consolidated Financial Statements for recently adopted and issued accounting standards.

Item 7A: *Quantitative and Qualitative Disclosures About Market Risk*

The Company is a global company that operates in over 35 countries and, as a result, the Company's net sales, cost of sales, operating expenses and balance sheet amounts are significantly impacted by fluctuations in foreign currency exchange rates. The Company is exposed to currency price risk on foreign currency exchange rate fluctuations when it translates its non-U.S. dollar foreign subsidiaries' financial statements into U.S. dollars, and when any of the Company's subsidiaries purchase or sell products or services in a currency other than its own currency.

The Company's principal strategy in managing exposure to changes in foreign currency exchange rates is to naturally hedge the foreign-currency-denominated liabilities on the Company's balance sheet against corresponding assets of the same currency, such that any changes in liabilities due to fluctuations in foreign currency exchange rates are typically offset by corresponding changes in assets.

The Company does not specifically enter into any derivatives that hedge foreign-currency-denominated assets, liabilities or commitments on its balance sheet, other than a portion of certain third-party accounts receivable and accounts payable, and the Company's net worldwide intercompany receivables and payables, which are eliminated in consolidation. The Company periodically aggregates its net worldwide balances by currency and then enters into foreign price currency exchange contracts that mature within 90 days to hedge a portion of the remaining balance to minimize some of the Company's currency price risk exposure. The foreign currency exchange contracts are not designated for hedge accounting treatment.

Principal hedged currencies include the Euro, Japanese yen, British pound, Mexican peso and Brazilian real. At December 31, 2017, 2016 and 2015, the Company held foreign currency exchange contracts with notional amounts totaling \$147 million, \$120 million and \$116 million, respectively.

The Company's foreign currency exchange contracts included in the consolidated balance sheets are classified as follows (in thousands):

	December 31, 2017	December 31, 2016
Other current assets	\$ 566	\$ 60
Other current liabilities	\$ 182	\$ 730

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The following is a summary of the activity included in cost of sales in the statements of operations related to the foreign currency exchange contracts (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Realized gains (losses) on closed contracts	\$3,894	\$(10,401)	\$(2,601)
Unrealized gains (losses) on open contracts	1,054	(883)	742
Cumulative net pre-tax gains (losses)	<u>\$4,948</u>	<u>\$(11,284)</u>	<u>\$(1,859)</u>

Assuming a hypothetical adverse change of 10% in year-end exchange rates (a strengthening of the U.S. dollar), the fair market value of the foreign currency exchange contracts outstanding as of December 31, 2017 would decrease pre-tax earnings by approximately \$15 million.

The Company's cash and cash equivalents are not subject to significant interest rate risk due to the short maturities of these instruments. The Company's cash equivalents represent highly liquid investments, with original maturities of 90 days or less, primarily in bank deposits, U.S. treasury bill money market funds and commercial paper. As of December 31, 2017, the carrying value of the Company's cash and cash equivalents approximated fair value.

The Company is exposed to the risk of interest rate fluctuations from the investments of cash generated from operations. Investments with maturities greater than 90 days are classified as investments, and are held primarily in U.S. treasury bills, U.S. dollar-denominated treasury bills and commercial paper, bank deposits and corporate debt securities. The Company maintains cash balances in various operating accounts in excess of federally insured limits, and in foreign subsidiary accounts in currencies other than the U.S. dollar. As of December 31, 2017 and 2016, \$3,326 million out of \$3,394 million and \$2,766 million out of \$2,813 million, respectively, of the Company's total cash, cash equivalents and investments were held by foreign subsidiaries. In addition, \$304 million out of \$3,394 million and \$261 million out of \$2,813 million of cash, cash equivalents and investments were held in currencies other than the U.S. dollar at December 31, 2017 and 2016, respectively. As of December 31, 2017, the Company has no holdings in auction rate securities or commercial paper issued by structured investment vehicles.

Assuming a hypothetical adverse change of 10% in year-end exchange rates (a strengthening of the U.S. dollar), the fair market value of the Company's cash, cash equivalents and investments held in currencies other than the U.S. dollar as of December 31, 2017 would decrease by approximately \$30 million, of which the majority would be recorded to foreign currency translation in other comprehensive income within stockholders' equity.

Item 8: Financial Statements and Supplementary Data

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Based on our evaluation under the framework in *Internal Control — Integrated Framework (2013)*, our management, including our chief executive officer and chief financial officer, concluded that our internal control over financial reporting was effective as of December 31, 2017.

The effectiveness of our internal control over financial reporting as of December 31, 2017 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Stockholders of Waters Corporation

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of Waters Corporation and its subsidiaries as of December 31, 2017 and 2016, and the related consolidated statements of operations, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2017, including the related notes and schedule of valuation and qualifying accounts for each of the three years in the period ended December 31, 2017 appearing under Item 15(c) (collectively referred to as the "consolidated financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control — Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2017 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control — Integrated Framework* (2013) issued by the COSO.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for share-based payment transactions in 2017.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express opinions on the Company's consolidated financial statements and on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

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Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts

February 27, 2018

We have served as the Company's auditor since 1994.

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2017	2016
(In thousands, except per share data)		
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 642,319	\$ 505,631
Investments	2,751,382	2,307,401
Accounts receivable, net	533,825	489,340
Inventories	270,294	262,682
Other current assets	72,314	70,391
Total current assets	4,270,134	3,635,445
Property, plant and equipment, net	349,278	337,118
Intangible assets, net	228,395	207,055
Goodwill	359,819	352,080
Other assets	116,728	130,361
Total assets	<u>\$ 5,324,354</u>	<u>\$ 4,662,059</u>
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Notes payable and debt	\$ 100,273	\$ 125,297
Accounts payable	64,537	67,740
Accrued employee compensation	69,024	57,465
Deferred revenue and customer advances	166,840	148,837
Accrued income taxes	73,008	15,244
Accrued warranty	13,026	13,391
Other current liabilities	119,449	92,347
Total current liabilities	606,157	520,321
Long-term liabilities:		
Long-term debt	1,897,501	1,701,966
Long-term portion of retirement benefits	67,334	72,568
Long-term income tax liabilities	456,949	10,458
Other long-term liabilities	62,625	54,797
Total long-term liabilities	2,484,409	1,839,789
Total liabilities	3,090,566	2,360,110
Commitments and contingencies (Notes 5, 8, 9, 10, 11 and 15)		
Stockholders' equity:		
Preferred stock, par value \$0.01 per share, 5,000 shares authorized, none issued at December 31, 2017 and December 31, 2016	—	—
Common stock, par value \$0.01 per share, 400,000 shares authorized, 159,845 and 158,634 shares issued, 79,337 and 80,023 shares outstanding at December 31, 2017 and December 31, 2016, respectively	1,598	1,586
Additional paid-in capital	1,745,088	1,607,241
Retained earnings	5,405,380	5,385,069
Treasury stock, at cost, 80,509 and 78,611 shares at December 31, 2017 and December 31, 2016, respectively	(4,808,211)	(4,475,667)
Accumulated other comprehensive loss	(110,067)	(216,280)
Total stockholders' equity	2,233,788	2,301,949
Total liabilities and stockholders' equity	<u>\$ 5,324,354</u>	<u>\$ 4,662,059</u>

The accompanying notes are an integral part of the consolidated financial statements.

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF OPERATIONS

	Year Ended December 31,		
	2017	2016	2015
	(In thousands, except per share data)		
Revenues:			
Product sales	\$1,552,349	\$1,460,296	\$1,385,256
Service sales	756,729	707,127	657,076
Total net sales	2,309,078	2,167,423	2,042,332
Costs and operating expenses:			
Cost of product sales	623,214	595,796	565,630
Cost of service sales	323,853	295,657	277,042
Selling and administrative expenses	544,703	513,031	495,747
Research and development expenses	132,593	125,187	118,545
Litigation provisions (Note 11)	11,114	3,524	3,939
Purchased intangibles amortization	6,743	9,889	10,123
Acquired in-process research and development (Note 2)	5,000	—	3,855
Total costs and operating expenses	1,647,220	1,543,084	1,474,881
Operating income	661,858	624,339	567,451
Interest expense	(56,839)	(44,911)	(36,243)
Interest income	36,078	20,686	10,711
Income before income taxes	641,097	600,114	541,919
Provision for income taxes	620,786	78,611	72,866
Net income	<u>\$ 20,311</u>	<u>\$ 521,503</u>	<u>\$ 469,053</u>
Net income per basic common share	\$ 0.25	\$ 6.46	\$ 5.70
Weighted-average number of basic common shares	79,793	80,786	82,336
Net income per diluted common share	\$ 0.25	\$ 6.41	\$ 5.65
Weighted-average number of diluted common shares and equivalents	80,604	81,417	83,087

The accompanying notes are an integral part of the consolidated financial statements.

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	Year Ended December 31,		
	2017	2016	2015
	(In thousands)		
Net income	\$ 20,311	\$521,503	\$469,053
Other comprehensive income (loss):			
Foreign currency translation	101,148	(66,996)	(70,481)
Unrealized (losses) gains on investments before income taxes	(1,794)	279	(1,825)
Income tax benefit	<u>68</u>	<u>111</u>	<u>31</u>
Unrealized (losses) gains on investments, net of tax	(1,726)	390	(1,794)
Retirement liability adjustment before reclassifications	7,832	(6,783)	191
Amounts reclassified to selling and administrative expenses	<u>3,948</u>	<u>3,263</u>	<u>4,443</u>
Retirement liability adjustment before income taxes	11,780	(3,520)	4,634
Income tax (expense) benefit	<u>(4,989)</u>	<u>572</u>	<u>(380)</u>
Retirement liability adjustment, net of tax	6,791	(2,948)	4,254
Other comprehensive income (loss)	<u>106,213</u>	<u>(69,554)</u>	<u>(68,021)</u>
Comprehensive income	<u>\$126,524</u>	<u>\$451,949</u>	<u>\$401,032</u>

The accompanying notes are an integral part of the consolidated financial statements.

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year Ended December 31,		
	2017	2016	2015
	(In thousands)		
Cash flows from operating activities:			
Net income	\$ 20,311	\$ 521,503	\$ 469,053
Adjustments to reconcile net income to net cash provided by operating activities:			
Stock-based compensation	39,436	40,998	33,368
Deferred income taxes	45,510	1,204	6,581
Depreciation	61,450	51,684	45,287
Amortization of intangibles	44,552	44,765	44,700
Excess tax benefit related to stock option plans	—	13,844	12,955
Gain on sale of assets	—	(1,500)	(1,377)
In-process research and development and other non-cash charges	5,000	—	4,638
Change in operating assets and liabilities, net of acquisitions:			
Increase in accounts receivable	(24,013)	(31,721)	(49,888)
Decrease (increase) in inventories	731	(20,147)	(19,967)
Increase in other current assets	(16,323)	(2,436)	(17,206)
Increase in other assets	(24,098)	(1,076)	(9,634)
Increase in accounts payable and other current liabilities	3,175	6,842	27,451
Increase in deferred revenue and customer advances	10,386	9,974	16,172
Effect of the 2017 Tax Act	530,383	—	—
Increase in other liabilities	1,140	8,986	11,115
Net cash provided by operating activities	697,640	642,920	573,248
Cash flows from investing activities:			
Additions to property, plant, equipment and software capitalization	(85,473)	(94,967)	(100,012)
Business acquisitions, net of cash acquired	—	(5,609)	(23,494)
Investment in unaffiliated company	(7,000)	—	—
Payments for intellectual property licenses	(5,000)	—	(3,000)
Purchases of investments	(2,960,379)	(2,396,032)	(2,010,368)
Maturities and sales of investments	2,522,100	2,004,690	1,731,981
Proceeds from sale of assets	—	4,000	5,154
Net cash used in investing activities	(535,752)	(487,918)	(399,739)
Cash flows from financing activities:			
Proceeds from debt issuances	1,480,190	485,298	325,219
Payments on debt	(1,310,214)	(325,323)	(120,140)
Payments of debt issuance costs	(2,984)	(1,705)	(2,382)
Proceeds from stock plans	97,789	62,189	52,060
Purchases of treasury shares	(332,544)	(325,759)	(334,705)
Proceeds from (payments for) derivative contracts	3,894	(10,401)	(2,601)
Net cash used in financing activities	(63,869)	(115,701)	(82,549)
Effect of exchange rate changes on cash and cash equivalents	38,669	(21,335)	(25,472)
Increase in cash and cash equivalents	136,688	17,966	65,488
Cash and cash equivalents at beginning of period	505,631	487,665	422,177
Cash and cash equivalents at end of period	<u>\$ 642,319</u>	<u>\$ 505,631</u>	<u>\$ 487,665</u>
Supplemental cash flow information:			
Income taxes paid	\$ 70,583	\$ 50,007	\$ 51,750
Interest paid	\$ 56,503	\$ 43,595	\$ 37,396

The accompanying notes are an integral part of the consolidated financial statements.

WATERS CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY

	Number of Common Shares	Common Stock	Additional Paid-In Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
(In thousands)							
Balance December 31, 2014	156,716	\$ 1,567	\$ 1,392,494	\$ 4,394,513	\$ (3,815,203)	\$ (78,705)	\$ 1,894,666
Net income	—	—	—	469,053	—	—	469,053
Other comprehensive loss	—	—	—	—	—	(68,021)	(68,021)
Issuance of common stock for employees:							
Employee Stock Purchase Plan	53	1	5,495	—	—	—	5,496
Stock options exercised	727	7	46,557	—	—	—	46,564
Tax benefit related to stock option plans	—	—	12,955	—	—	—	12,955
Treasury stock	—	—	—	—	(334,705)	—	(334,705)
Stock-based compensation	181	2	32,841	—	—	—	32,843
Balance December 31, 2015	<u>157,677</u>	<u>\$ 1,577</u>	<u>\$ 1,490,342</u>	<u>\$ 4,863,566</u>	<u>\$ (4,149,908)</u>	<u>\$ (146,726)</u>	<u>\$ 2,058,851</u>
Net income	—	—	—	521,503	—	—	521,503
Other comprehensive loss	—	—	—	—	—	(69,554)	(69,554)
Issuance of common stock for employees:							
Employee Stock Purchase Plan	53	1	6,277	—	—	—	6,278
Stock options exercised	730	7	55,904	—	—	—	55,911
Tax benefit related to stock option plans	—	—	13,844	—	—	—	13,844
Treasury stock	—	—	—	—	(325,759)	—	(325,759)
Stock-based compensation	174	1	40,874	—	—	—	40,875
Balance December 31, 2016	<u>158,634</u>	<u>\$ 1,586</u>	<u>\$ 1,607,241</u>	<u>\$ 5,385,069</u>	<u>\$ (4,475,667)</u>	<u>\$ (216,280)</u>	<u>\$ 2,301,949</u>
Net income	—	—	—	20,311	—	—	20,311
Other comprehensive income	—	—	—	—	—	106,213	106,213
Issuance of common stock for employees:							
Employee Stock Purchase Plan	50	1	6,874	—	—	—	6,875
Stock options exercised	972	10	90,904	—	—	—	90,914
Treasury stock	—	—	—	—	(332,544)	—	(332,544)
Stock-based compensation	189	1	40,069	—	—	—	40,070
Balance December 31, 2017	<u>159,845</u>	<u>\$ 1,598</u>	<u>\$ 1,745,088</u>	<u>\$ 5,405,380</u>	<u>\$ (4,808,211)</u>	<u>\$ (110,067)</u>	<u>\$ 2,233,788</u>

The accompanying notes are an integral part of the consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1 Description of Business and Organization

Waters Corporation (the “Company”) is a specialty measurement company that has pioneered analytical workflow solutions involving liquid chromatography, mass spectrometry and thermal analysis innovations serving the life, materials and food sciences for nearly 60 years. The Company primarily designs, manufactures, sells and services high performance liquid chromatography (“HPLC”), ultra performance liquid chromatography (“UPLC®”) and together with HPLC, referred to as “LC”) and mass spectrometry (“MS”) technology systems and support products, including chromatography columns, other consumable products and comprehensive post-warranty service plans. These systems are complementary products that are frequently employed together (“LC-MS”) and sold as integrated instrument systems using common software platforms. LC is a standard technique and is utilized in a broad range of industries to detect, identify, monitor and measure the chemical, physical and biological composition of materials, and to purify a full range of compounds. MS technology, principally in conjunction with chromatography, is employed in drug discovery and development, including clinical trial testing, the analysis of proteins in disease processes (known as “proteomics”), nutritional safety analysis and environmental testing. LC-MS instruments combine a liquid phase sample introduction and separation system with mass spectrometric compound identification and quantification. In addition, the Company designs, manufactures, sells and services thermal analysis, rheometry and calorimetry instruments through its TA® product line. These instruments are used in predicting the suitability and stability of fine chemicals, pharmaceuticals, water, polymers, metals and viscous liquids for various industrial, consumer goods and healthcare products, as well as for life science research. The Company is also a developer and supplier of advanced software-based products that interface with the Company’s instruments, as well as other manufacturers’ instruments.

2 Basis of Presentation and Summary of Significant Accounting Policies

Use of Estimates

The preparation of consolidated financial statements in conformity with generally accepted accounting principles (“GAAP”) requires the Company to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent liabilities at the dates of the financial statements. On an ongoing basis, the Company evaluates its estimates, including those related to revenue recognition, product returns and allowances, bad debts, inventory valuation, goodwill and intangible assets, income taxes, warranty and installation provisions, litigation, retirement plan obligations, stock-based compensation, equity investments and contingencies. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual amounts may differ from these estimates under different assumptions or conditions.

Risks and Uncertainties

The Company is subject to risks common to companies in the analytical instrument industry, including, but not limited to, global economic and financial market conditions, fluctuations in foreign currency exchange rates, fluctuations in customer demand, development by its competitors of new technological innovations, costs of developing new technologies, levels of debt and debt service requirements, risk of disruption, dependence on key personnel, protection and litigation of proprietary technology, shifts in taxable income between tax jurisdictions and compliance with regulations of the U.S. Food and Drug Administration and similar foreign regulatory authorities and agencies.

Principles of Consolidation

The consolidated financial statements include the accounts of the Company and its subsidiaries, which are wholly owned. The Company consolidates entities in which it owns or controls fifty percent or more of the voting shares. All inter-company balances and transactions have been eliminated.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Translation of Foreign Currencies

The functional currency of each of the Company's foreign operating subsidiaries is the local currency of its country of domicile, except for the Company's subsidiaries in Hong Kong, Singapore and the Cayman Islands, where the underlying transactional cash flows are denominated in currencies other than the respective local currency of domicile. The functional currency of the Hong Kong, Singapore and Cayman Islands subsidiaries is the U.S. dollar, based on the respective entity's cash flows.

For most of the Company's foreign operations, assets and liabilities are translated into U.S. dollars at exchange rates prevailing on the balance sheet date, while revenues and expenses are translated at average exchange rates prevailing during the period. Any resulting translation gains or losses are included in accumulated other comprehensive income in the consolidated balance sheets. The Company's net sales derived from operations outside the United States were 71%, 69% and 68% in 2017, 2016 and 2015, respectively. Gains and losses from foreign currency transactions are included in net income in the consolidated statements of operations. In 2017, 2016 and 2015 foreign currency transactions resulted in net losses of \$1 million and \$4 million, and a net gain of \$3 million, respectively.

Seasonality of Business

The Company typically experiences an increase in sales in the fourth quarter, as a result of purchasing habits for capital goods of customers that tend to exhaust their spending budgets by calendar year end.

Cash, Cash Equivalents and Investments

Cash equivalents represent highly liquid investments, with original maturities of 90 days or less, primarily in bank deposits, U.S. treasury bill money market funds and commercial paper. Investments with longer maturities are classified as investments, and are held primarily in U.S. treasury bills, U.S. dollar-denominated treasury bills and commercial paper, bank deposits and corporate debt securities.

Investments are classified as available-for-sale in accordance with the accounting standards for investments in debt and equity securities. All available-for-sale securities are recorded at fair market value and any unrealized holding gains and losses, to the extent deemed temporary, are included in accumulated other comprehensive income in stockholders' equity, net of the related tax effects. If any adjustment to fair value reflects a decline in the value of the investment, the Company considers all available evidence to evaluate the extent to which the decline is "other than temporary" and, if so, records a loss as a charge to the statement of operations. The Company classifies its investments exclusive of those categorized as cash equivalents.

The Company maintains cash balances in various operating accounts in excess of federally insured limits, and in foreign subsidiary accounts in currencies other than the U.S. dollar. As of December 31, 2017 and 2016, \$3,326 million out of \$3,394 million and \$2,766 million out of \$2,813 million, respectively, of the Company's total cash, cash equivalents and investments were held by foreign subsidiaries. In addition, \$304 million out of \$3,394 million and \$261 million out of \$2,813 million of cash, cash equivalents and investments were held in currencies other than the U.S. dollar at December 31, 2017 and 2016, respectively.

Accounts Receivable and Allowance for Doubtful Accounts

Trade accounts receivable are recorded at the invoiced amount and do not bear interest. The allowance for doubtful accounts is the best estimate of the amount of probable credit losses in the existing accounts receivable. The allowance is based on a number of factors, including historical experience and the customer's credit-worthiness. The allowance for doubtful accounts is reviewed on at least a quarterly basis. Past due balances over

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

90 days and over a specified amount are reviewed individually for collectibility. Account balances are charged against the allowance when the Company determines it is probable that the receivable will not be recovered. The Company does not have any off-balance sheet credit exposure related to its customers. The allowance for sales returns is the best estimate of the amount of future product returns related to current period revenue and is based on historical experience.

The following is a summary of the activity of the Company's allowance for doubtful accounts and sales returns for the years ended December 31, 2017, 2016 and 2015 (in thousands):

	<u>Balance at</u> <u>Beginning of Period</u>	<u>Additions</u>	<u>Deductions</u>	<u>Balance at</u> <u>End</u> <u>of Period</u>
Allowance for Doubtful Accounts and Sales Returns:				
2017	\$ 8,657	\$ 9,059	\$ (8,386)	\$ 9,330
2016	\$ 7,496	\$ 6,912	\$ (5,751)	\$ 8,657
2015	\$ 7,179	\$ 6,739	\$ (6,422)	\$ 7,496

Concentration of Credit Risk

The Company sells its products and services to a significant number of large and small customers throughout the world, with net sales to the pharmaceutical industry of approximately 56% in both 2017 and 2016 and 54% in 2015. None of the Company's individual customers accounted for more than 2% of annual Company sales in 2017, 2016 or 2015. The Company performs continuing credit evaluations of its customers and generally does not require collateral, but in certain circumstances may require letters of credit or deposits. Historically, the Company has not experienced significant bad debt losses.

Inventory

The Company values all of its inventories at the lower of cost or net realizable value on a first-in, first-out basis ("FIFO").

Income Taxes

Deferred income taxes are recognized for temporary differences between the financial statement and income tax basis of assets and liabilities using tax rates in effect for the years in which the differences are expected to reverse. A valuation allowance is provided to offset any net deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. Appropriate long-term liabilities have also been recorded to recognize uncertain tax return reporting positions.

Property, Plant and Equipment

Property, plant and equipment are recorded at cost. Expenditures for maintenance and repairs are charged to expense, while the costs of significant improvements are capitalized. Depreciation is provided using the straight-line method over the following estimated useful lives: buildings — fifteen to thirty years; building improvements — five to ten years; leasehold improvements — the shorter of the economic useful life or life of lease; and production and other equipment — three to ten years. Upon retirement or sale, the cost of the assets disposed of and the related accumulated depreciation are eliminated from the consolidated balance sheets and related gains or losses are reflected in the consolidated statements of operations.

Asset Impairments

The Company reviews its long-lived assets for impairment in accordance with the accounting standards for property, plant and equipment. Whenever events or circumstances indicate that the carrying amount of an asset

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

may not be recoverable, the Company evaluates the recoverability of the carrying value of the asset based on the expected future cash flows, relying on a number of factors, including, but not limited to, operating results, business plans, economic projections and anticipated future cash flows. If the asset is deemed not recoverable, it is written down to fair value and the impairment is recorded in the consolidated statements of operations.

Business Combinations and Asset Acquisitions

The Company accounts for business acquisitions under the accounting standards for business combinations. The results of each acquisition are included in the Company's consolidated results as of the acquisition date and the purchase price of an acquisition is allocated to tangible and intangible assets and assumed liabilities based on their estimated fair values. Any excess of the fair value consideration transferred over the estimated fair values of the net assets acquired is recognized as goodwill. Acquired in-process research and development ("IPR&D") included in a business combination is capitalized as an indefinite-lived intangible asset. Development costs incurred after the acquisition are expensed as incurred and acquired IPR&D is tested for impairment annually until completion of the acquired programs. Upon commercialization, this indefinite-lived intangible asset is then accounted for as a finite-lived intangible asset and amortized on a straight-line basis over its estimated useful life, subject to periodic impairment reviews. If the research and development project is abandoned, the indefinite-lived asset is charged to expense. Legal costs, due diligence costs, business valuation costs and all other business acquisition costs are expensed when incurred.

The Company also acquires intellectual property through licensing arrangements. These arrangements often require upfront payments and may include additional milestone or royalty payments, contingent upon certain future events. IPR&D acquired in an asset acquisition (as opposed to a business combination) is expensed immediately unless there is an alternative future use. Subsequent payments made for the achievement of milestones are evaluated to determine whether they have an alternative future use or should be expensed. Payments made to third parties subsequent to commercialization are capitalized and amortized over the remaining useful life of the related asset, and are classified as intangible assets.

Goodwill and Other Intangible Assets

The Company tests for goodwill impairment using a fair-value approach at the reporting unit level annually, or earlier, if an event occurs or circumstances change that would more likely than not reduce the fair value of a reporting unit below its carrying amount. Additionally, the Company performs an annual goodwill impairment assessment for its reporting units as of January 1 each year. The goodwill and other intangible assets accounting standards define a reporting unit as an operating segment, or one level below an operating segment, if discrete financial information is prepared and reviewed by management. For goodwill impairment review purposes, the Company has two reporting units: Waters® and TA®. Goodwill is allocated to the reporting units at the time of acquisition. Under the impairment test, if a reporting unit's carrying amount exceeds its estimated fair value, goodwill impairment is recognized to the extent that the carrying amount of goodwill exceeds the implied fair value of the goodwill. The fair value of reporting units was estimated using a discounted cash flows technique, which includes certain management assumptions, such as estimated future cash flows, estimated growth rates and discount rates.

The Company's intangible assets include purchased technology; capitalized software development costs; costs associated with acquiring Company patents, trademarks and intellectual properties, such as licenses; debt issuance costs and acquired IPR&D. Purchased intangibles are recorded at their fair market values as of the acquisition date and amortized over their estimated useful lives, ranging from one to fifteen years. Other intangibles are amortized over a period ranging from one to ten years. Debt issuance costs are amortized over the life of the related debt. Acquired IPR&D is amortized from the date of completion of the acquired program over its estimated useful life. IPR&D and indefinite-lived intangibles are tested annually for impairment.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Software Development Costs

The Company capitalizes internal and external software development costs for products offered for sale in accordance with the accounting standards for the costs of software to be sold, leased, or otherwise marketed. Capitalized costs are amortized to cost of sales over the period of economic benefit, which approximates a straight-line basis over the estimated useful lives of the related software products, generally three to ten years. The Company capitalized \$35 million and \$33 million of direct expenses that were related to the development of software in 2017 and 2016, respectively. Net capitalized software included in intangible assets totaled \$153 million and \$132 million at December 31, 2017 and 2016, respectively. See Note 7, "Goodwill and Other Intangibles".

The Company capitalizes internal software development costs for internal use in accordance with the accounting standards for goodwill and other intangible assets. Capitalized internal software development costs are amortized over the period of economic benefit, which approximates a straight-line basis over ten years. Net capitalized internal software included in property, plant and equipment totaled \$3 million at both December 31, 2017 and 2016.

Other Investments

The Company accounts for its investments that represent less than twenty percent ownership, and for which the Company does not have significant influence, using the accounting standards for investments in debt and equity securities. Investments for which the Company does not have the ability to exercise significant influence, and for which there is not a readily determinable market value, are accounted for under the cost method of accounting. The Company periodically evaluates the carrying value of its investments accounted for under the cost method of accounting and carries them at the lower of cost or estimated net realizable value. For investments in which the Company owns or controls between twenty and forty-nine percent of the voting shares, or over which it exerts significant influence over operating and financial policies, the equity method of accounting is used. The Company's share of net income or losses of equity investments is included in the consolidated statements of operations and was not material in any period presented.

During the year ended December 31, 2017, the Company made a \$7 million investment in a developer of analytical system solutions used to make measurements, predict stability and accelerate product discovery in the routine analytic, process monitoring and quality control release processes for life science and biopharmaceutical markets. This investment was accounted for under the cost method of accounting.

During the year ended December 31, 2016, the Company sold an equity investment that was accounted for using the equity method of accounting and was included in other assets in the consolidated balance sheet for \$4 million in cash.

Fair Value Measurements

In accordance with the accounting standards for fair value measurements and disclosures, certain of the Company's assets and liabilities are measured at fair value on a recurring basis as of December 31, 2017 and 2016. Fair values determined by Level 1 inputs utilize observable data, such as quoted prices in active markets. Fair values determined by Level 2 inputs utilize data points other than quoted prices in active markets that are observable either directly or indirectly. Fair values determined by Level 3 inputs utilize unobservable data points for which there is little or no market data, which require the reporting entity to develop its own assumptions.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following table represents the Company's assets and liabilities measured at fair value on a recurring basis at December 31, 2017 (in thousands):

	Total at December 31, 2017	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
U.S. Treasury securities	\$ 591,988	\$ —	\$ 591,988	\$ —
Foreign government securities	6,952	—	6,952	—
Corporate debt securities	1,975,160	—	1,975,160	—
Time deposits	371,511	—	371,511	—
Equity securities	147	—	147	—
Waters 401(k) Restoration Plan assets	35,645	35,645	—	—
Foreign currency exchange contracts	566	—	566	—
Total	<u>\$2,981,969</u>	<u>\$ 35,645</u>	<u>\$2,946,324</u>	<u>\$ —</u>
Liabilities:				
Contingent consideration	\$ 3,247	\$ —	\$ —	\$ 3,247
Foreign currency exchange contracts	182	—	182	—
Total	<u>\$ 3,429</u>	<u>\$ —</u>	<u>\$ 182</u>	<u>\$ 3,247</u>

The following table represents the Company's assets and liabilities measured at fair value on a recurring basis at December 31, 2016 (in thousands):

	Total at December 31, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
U.S. Treasury securities	\$ 570,313	\$ —	\$ 570,313	\$ —
Foreign government securities	17,991	—	17,991	—
Corporate debt securities	1,643,838	—	1,643,838	—
Time deposits	199,906	—	199,906	—
Equity securities	147	—	147	—
Waters 401(k) Restoration Plan assets	30,954	30,954	—	—
Foreign currency exchange contracts	60	—	60	—
Total	<u>\$2,463,209</u>	<u>\$ 30,954</u>	<u>\$2,432,255</u>	<u>\$ —</u>
Liabilities:				
Contingent consideration	\$ 3,007	\$ —	\$ —	\$ 3,007
Foreign currency exchange contracts	730	—	730	—
Total	<u>\$ 3,737</u>	<u>\$ —</u>	<u>\$ 730</u>	<u>\$ 3,007</u>

Fair Value of 401(k) Restoration Plan Assets

The 401(k) Restoration Plan is a nonqualified defined contribution plan and the assets were held in registered mutual funds and have been classified as Level 1. The fair values of the assets in the plan are determined through market and observable sources from daily quoted prices on nationally recognized securities exchanges.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Fair Value of Cash Equivalents, Investment and Foreign Currency Exchange Contracts

The fair values of the Company's cash equivalents, investments and foreign currency exchange contracts are determined through market and observable sources and have been classified as Level 2. These assets and liabilities have been initially valued at the transaction price and subsequently valued, typically utilizing third-party pricing services. The pricing services use many inputs to determine value, including reportable trades, benchmark yields, credit spreads, broker/dealer quotes, current spot rates and other industry and economic events. The Company validates the prices provided by third-party pricing services by reviewing their pricing methods and obtaining market values from other pricing sources.

Fair Value of Contingent Consideration

The fair value of the Company's liability for contingent consideration relates to the July 2014 acquisition of Medimass Research, Development and Service Kft. and is determined using a probability-weighted discounted cash flow model, which uses significant unobservable inputs, and has been classified as Level 3. Subsequent changes in the fair value of the contingent consideration liability are recorded in the results of operations. The fair value of the contingent consideration liability associated with future earnout payments is based on several factors, including the estimated future results and a discount rate that reflects both the likelihood of achieving the estimated future results and the Company's creditworthiness. A change in any of these unobservable inputs can significantly change the fair value of the contingent consideration. Although there is no contractual limit, the fair value of future contingent consideration payments was estimated to be \$3 million at both December 31, 2017 and December 31, 2016, based on the Company's best estimate, as the earnout is based on future sales of certain products, some of which are currently in development, through 2034.

Fair Value of Other Financial Instruments

The Company's cash, accounts receivable, accounts payable and variable interest rate debt are recorded at cost, which approximates fair value due to their short-term nature. The carrying value of the Company's fixed interest rate debt was \$610 million at December 31, 2017 and 2016. The fair value of the Company's fixed interest rate debt was estimated using discounted cash flow models, based on estimated current rates offered for similar debt under current market conditions for the Company. The fair value of the Company's fixed interest rate debt was estimated to be \$608 million and \$603 million at December 31, 2017 and 2016, respectively, using Level 2 inputs.

Derivative Transactions

The Company is a global company that operates in over 35 countries and, as a result, the Company's net sales, cost of sales, operating expenses and balance sheet amounts are significantly impacted by fluctuations in foreign currency exchange rates. The Company is exposed to currency price risk on foreign currency exchange rate fluctuations when it translates its non-U.S. dollar foreign subsidiaries' financial statements into U.S. dollars, and when any of the Company's subsidiaries purchase or sell products or services in a currency other than its own currency.

The Company's principal strategy in managing exposure to changes in foreign currency exchange rates is to naturally hedge the foreign-currency-denominated liabilities on the Company's balance sheet against corresponding assets of the same currency, such that any changes in liabilities due to fluctuations in foreign currency exchange rates are typically offset by corresponding changes in assets.

The Company does not specifically enter into any derivatives that hedge foreign-currency-denominated assets, liabilities or commitments on its balance sheet, other than a portion of certain third-party accounts

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

receivable and accounts payable, and the Company's net worldwide intercompany receivables and payables, which are eliminated in consolidation. The Company periodically aggregates its net worldwide balances by currency and then enters into foreign currency exchange contracts that mature within 90 days to hedge a portion of the remaining balance to minimize some of the Company's currency price risk exposure. The foreign currency exchange contracts are not designated for hedge accounting treatment.

Principal hedged currencies include the Euro, Japanese yen, British pound, Mexican peso and Brazilian real. At December 31, 2017, 2016 and 2015, the Company held foreign currency exchange contracts with notional amounts totaling \$147 million, \$120 million and \$116 million, respectively.

The Company's foreign currency exchange contracts included in the consolidated balance sheets are classified as follows (in thousands):

	December 31, 2017	December 31, 2016
Other current assets	\$ 566	\$ 60
Other current liabilities	\$ 182	\$ 730

The following is a summary of the activity included in cost of sales in the statements of operations related to the foreign currency exchange contracts (in thousands):

	Year Ended December 31,		
	2017	2016	2015
Realized gains (losses) on closed contracts	\$3,894	\$(10,401)	\$(2,601)
Unrealized gains (losses) on open contracts	1,054	(883)	742
Cumulative net pre-tax gains (losses)	<u>\$4,948</u>	<u>\$(11,284)</u>	<u>\$(1,859)</u>

Stockholders' Equity

In May 2017, the Company's Board of Directors authorized the Company to repurchase up to \$1 billion of its outstanding common stock over a three-year period. During 2017, 2016 and 2015, the Company repurchased 1.8 million, 2.3 million and 2.6 million shares of the Company's outstanding common stock at a cost of \$323 million, \$318 million and \$327 million, respectively, under the May 2017 authorization and other previously announced programs. As of December 31, 2017, the Company repurchased an aggregate of 5.5 million shares at a cost of \$750 million under the May 2014 repurchase program, which is now completed. As of December 31, 2017, the Company repurchased an aggregate of 1.1 million shares at a cost of \$200 million under the May 2017 repurchase program and has a total of \$800 million authorized for future repurchases. In addition, the Company repurchased \$10 million, \$8 million and \$7 million of common stock related to the vesting of restricted stock units during the years ended December 31, 2017, 2016 and 2015, respectively. The Company believes that it has the financial flexibility to fund these share repurchases given current cash levels and debt borrowing capacity, as well as to invest in research, technology and business acquisitions to further grow the Company's sales and profits.

Revenue Recognition

Sales of products and services are generally recorded based on product shipment and performance of service, respectively. The Company's deferred revenue on the consolidated balance sheets consists of the obligation on instrument service contracts and customer payments received in advance, prior to shipment of the instrument. Revenue is recognized when all of the following revenue recognition criteria are met: persuasive evidence of an arrangement exists; delivery or performance has occurred; the vendor's fee is fixed or determinable; collectibility

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

is reasonably assured and, if applicable, upon acceptance when acceptance criteria with contractual cash holdback are specified. Shipping and handling costs invoiced to the customer are included in net sales, while the costs associated with shipping and handling are included in cost of sales.

Product shipments and service contracts are not recorded as revenue until a valid purchase order or master agreement is received, specifying fixed terms and prices. The Company generally recognizes product revenue when legal title has transferred and risk of loss passes to the customer. The Company generally structures its sales arrangements as shipping point or international equivalent and, accordingly, recognizes revenue upon shipment. In some cases, destination-based shipping terms are included in sales arrangements, in which cases revenue is generally recognized when the products arrive at the customer site.

The Company's method of revenue recognition for certain products requiring installation is accounted for in accordance with multiple-element revenue recognition accounting standards. With respect to the installation obligations, the larger of the contractual cash holdback or the best estimate of selling price of the installation service is deferred when the product is shipped and revenue is recognized as a multiple-element arrangement when installation is complete. The Company determines the best estimate of selling price of installation based upon a number of factors, including hourly service billing rates and estimated installation hours.

Instrument service contracts are typically billed at the beginning of the maintenance period. The amount of the service contract is amortized ratably to revenue over the instrument maintenance period. There are no deferred costs associated with the service contract, as the cost of the service is recorded when the service is performed. No revenue is recognized until all revenue recognition criteria have been met.

Sales of standalone software are accounted for in accordance with the accounting standards for software revenue recognition. The Company's software arrangements typically include software licenses and maintenance contracts. Software license revenue is recognized when persuasive evidence of an arrangement exists, delivery has occurred, the fee is fixed or determinable, collection is probable, and there are no significant post-delivery obligations remaining. The revenue associated with the software maintenance contract is recognized ratably over the maintenance term. Unspecified rights to software upgrades are typically sold as part of the maintenance contract on a when-and-if-available basis. The Company uses the residual method to allocate software revenue when a transaction includes multiple elements and vendor specific objective evidence of fair value of undelivered elements exists. Under the residual method, the fair value of the undelivered element (maintenance) is deferred and the remaining portion of the arrangement fee is allocated to the delivered element (software license) and recognized as revenue.

Returns and customer credits are infrequent and are recorded as a reduction to sales. Rights of return are not included in sales arrangements. Revenue associated with products that contain specific customer acceptance criteria is not recognized before the customer acceptance criteria are satisfied. Discounts from list prices are recorded as a reduction to sales.

Product Warranty Costs

The Company accrues estimated product warranty costs at the time of sale, which are included in cost of sales in the consolidated statements of operations. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its component suppliers, the Company's warranty obligation is affected by product failure rates, material usage and service delivery costs incurred in correcting a product failure. The amount of the accrued warranty liability is based on historical information, such as past experience, product failure rates, number of units repaired and estimated costs of material and labor. The liability is reviewed for reasonableness at least quarterly.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The following is a summary of the activity of the Company's accrued warranty liability for the years ended December 31, 2017, 2016 and 2015 (in thousands):

	<u>Balance at Beginning of Period</u>	<u>Accruals for Warranties</u>	<u>Settlements Made</u>	<u>Balance at End of Period</u>
Accrued warranty liability:				
2017	\$ 13,391	\$ 8,746	\$ (9,111)	\$13,026
2016	\$ 13,349	\$ 9,755	\$ (9,713)	\$13,391
2015	\$ 13,266	\$ 8,390	\$ (8,307)	\$13,349

Advertising Costs

All advertising costs are expensed as incurred and are included in selling and administrative expenses in the consolidated statements of operations. Advertising expenses were \$6 million for 2017 and were \$11 million for both 2016 and 2015.

Research and Development Expenses

Research and development expenses are comprised of costs incurred in performing research and development activities, including salaries and benefits, facilities costs, overhead costs, contract services and other outside costs. Research and development expenses are expensed as incurred. During 2017 and 2015, the Company incurred \$5 million and \$4 million charges, respectively, for acquired in-process research and development related to the licensing of certain intellectual property relating to mass spectrometry technologies yet to be commercialized and for which there was no future alternative use as of the acquisition date. These licensing arrangements are significantly related to new, biologically-focused applications, as well as other applications, and require the Company to make additional future payments of up to \$7 million if certain milestones are achieved, as well as royalties on future net sales.

Stock-Based Compensation

The Company has two stock-based compensation plans, which are described in Note 12, "Stock-Based Compensation".

Earnings Per Share

In accordance with the earnings per share accounting standards, the Company presents two earnings per share ("EPS") amounts. Income per basic common share is based on income available to common shareholders and the weighted-average number of common shares outstanding during the periods presented. Income per diluted common share includes additional dilution from potential common stock, such as stock issuable pursuant to the exercise of stock options outstanding.

Retirement Plans

The Company sponsors various retirement plans, which are described in Note 15, "Retirement Plans".

Comprehensive Income

The Company accounts for comprehensive income in accordance with the accounting standards for comprehensive income, which establish the accounting rules for reporting and displaying comprehensive income. These standards require that all components of comprehensive income be reported in a financial statement that is displayed with the same prominence as other financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Recently Adopted Accounting Standards

In July 2015, accounting guidance was issued which clarifies the measurement of inventory. The new guidance requires inventory to be measured at the lower of cost and net realizable value. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonably predictable costs of completion, disposal and transportation. This guidance is effective for annual and interim periods beginning after December 15, 2016. The Company adopted this standard as of January 1, 2017 and this standard did not have a material effect on the Company's financial position, results of operations and cash flows.

In March 2016, accounting guidance was issued which simplifies the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities and classification on the statement of cash flows. This guidance was effective for annual and interim reporting periods beginning after December 15, 2016. The new guidance is required to be adopted on a prospective basis for the statement of operations and the Company has elected to retrospectively apply the cash flow aspects of this new guidance. In addition, the Company has elected to continue to estimate forfeitures at the time of grant and update forfeiture estimates throughout the requisite service period. The Company adopted this standard as of January 1, 2017 and recognized an excess tax benefit related to stock-based compensation which decreased income tax expense for 2017 by \$20 million and added \$0.24 to net income per diluted share. These excess tax benefits were previously recorded in equity and there were no cumulative-effect adjustments to retained earnings as a result of the adoption of this standard. In addition, the Company reclassified \$14 million and \$13 million of excess tax benefits related to stock-based compensation from cash flows from financing activities to cash flows from operating activities for 2016 and 2015, respectively.

Recently Issued Accounting Standards

In May 2014, amended accounting guidance was issued regarding the recognition of revenue from contracts with customers. The objective of this guidance is to significantly enhance comparability and clarify principles of revenue recognition practices across entities, industries, jurisdictions and capital markets. This guidance was originally effective for annual and interim reporting periods beginning after December 15, 2016; however, the Financial Accounting Standards Board ("FASB") amended the standard in August 2015 to delay the effective period date by one year to annual and interim periods beginning after December 15, 2017. Adoption prior to December 15, 2016 was not permitted. In March 2016, the FASB clarified the implementation guidance on principal versus agent considerations and, in April 2016, clarification was made regarding certain aspects of identifying performance obligations and licensing implementation guidance. In May 2016, additional guidance was issued related to disclosure of remaining performance obligations, as well as other amendments to guidance on collectibility, non-cash consideration and the presentation of sales and other similar taxes collected from customers. The Company did not early adopt this accounting standard and will apply the modified-retrospective method. The Company does not expect that the adoption of this standard will have a material impact on the Company's financial position, results of operations and cash flows.

In January 2016, accounting guidance was issued which primarily affects the classification and measurement of certain financial instruments, principally equity investments and certain financial liabilities. Under the new guidance, there will no longer be an available-for-sale classification for equity securities with readily determinable fair values. Changes to the fair value of equity investments will be recognized through earnings. Equity investments carried at cost should be adjusted for changes in observable prices, as applicable, and qualitatively assessed for impairment annually. Changes to the fair value of financial liabilities under the fair value option due to instrument specific credit risk will be recognized separately in other comprehensive income. The new guidance also requires financial assets and financial liabilities to be presented separately and grouped by measurement category in the notes to the financial statements. This guidance is effective for annual and interim reporting periods beginning after December 15, 2017 and early adoption of certain provisions of this guidance is

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

permitted. The Company currently does not expect that the adoption of this standard will have a material effect on the Company's financial position, results of operations and cash flows.

In February 2016, accounting guidance was issued regarding the accounting for leases. This new comprehensive lease standard amends various aspects of existing accounting guidance for leases. The core principle of the new guidance will require lessees to present the assets and liabilities that arise from leases on their balance sheets. This guidance is effective for annual and interim reporting periods beginning after December 15, 2018 and early adoption is permitted. The Company expects that the adoption of this standard will have a material effect on the Company's balance sheet; however, it is not expected to have an overall material impact on the Company's results of operations and cash flows. Please see Note 11, "Other Commitments and Contingencies", for additional information.

In June 2016, accounting guidance was issued that modifies the recognition of credit losses related to financial assets, such as debt securities, trade receivables, net investments in leases, off-balance sheet credit exposures, and other financial assets that have the contractual right to receive cash. Current guidance requires the recognition of a credit loss when it is considered probable that a loss event has occurred. The new guidance requires the measurement of expected credit losses to be based upon relevant information, including historical experience, current conditions, and reasonable and supportable forecasts that affect the collectability of the asset. As such, expected credit losses may be recognized sooner under the new guidance due to the broader range of information that will be required to determine credit loss estimates. The new guidance also amends the current other-than-temporary impairment model used for debt securities classified as available-for-sale. When the fair value of an available-for-sale debt security is below its amortized cost, the new guidance requires the total unrealized loss to be bifurcated into its credit and non-credit components. Any expected credit losses or subsequent recoveries will be recognized in earnings and any changes not considered credit related will continue to be recognized within other comprehensive income. This guidance is effective for annual and interim periods beginning after December 15, 2019. The Company currently does not expect that the adoption of this standard will have a material effect on the Company's financial position, results of operations and cash flows.

In August 2016, accounting guidance was issued that clarifies the classification of certain cash flows. The new guidance addresses eight specific areas where current accounting guidance is either unclear or does not specifically address classification issues. This guidance is effective for annual and interim periods beginning after December 15, 2017 and early adoption is permitted. The Company currently does not believe that the adoption of this standard will have a material impact on the Company's cash flows.

In October 2016, accounting guidance was issued regarding intra-entity transfers of assets other than inventory. The new guidance eliminates the deferral of tax effects on intra-entity transfers other than inventory and requires an entity to recognize the income tax consequences when the transfer occurs. This guidance is effective for annual and interim periods beginning after December 15, 2017 and early adoption is permitted. The Company does not believe that the adoption of this standard will have a material impact on the Company's financial position, results of operations and cash flows.

In January 2017, accounting guidance was issued that clarifies the definition of a business. The new guidance provides a more robust framework to use in determining when a set of assets and activities is a business, thus narrowing the definition and the amount of transactions accounted for as business combinations. This guidance is effective for annual and interim periods beginning after December 15, 2017 and early application is permitted under certain circumstances. The Company will apply this guidance prospectively to any business combination transactions that take place after adoption of this new guidance.

In January 2017, accounting guidance was issued that simplifies the accounting for goodwill impairment. The guidance eliminates step 2 of the goodwill impairment test, which requires a hypothetical purchase price

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

allocation. This guidance is effective for annual and interim periods beginning after December 15, 2019 and early adoption is permitted. The Company currently does not expect that the adoption of this standard will have a material effect on the Company’s financial position, results of operations and cash flows.

In March 2017, accounting guidance was issued regarding the presentation of net periodic pension cost and net periodic postretirement benefit cost. The new guidance requires that an employer disaggregate the service cost component from other components of net benefit cost, with service cost reported in the same line items as other compensation costs and the other components of net benefit costs presented outside income from operations. This guidance is effective for annual and interim periods beginning after December 15, 2017 and early adoption is permitted. The Company currently does not believe that the adoption of this standard will have a material impact on the Company’s financial position, results of operations and cash flows. Please see Note 15, “Retirement Plans”, for additional information.

In March 2017, accounting guidance was issued to amend the amortization period for certain purchased callable debt securities held at a premium. Specifically, the amortization period for certain callable debt securities will be shortened to end at the earliest call date. This guidance is effective for annual and interim periods beginning after December 15, 2018 and early adoption is permitted. The Company currently does not believe that the adoption of this standard will have a material impact on the Company’s financial position, results of operations and cash flows.

In May 2017, accounting guidance was issued that clarifies the accounting for a change to the terms or conditions of a share-based payment award. The standard provides more specific guidance for determining when a change to an award requires modification accounting and when it should be deemed purely administrative in nature. This guidance is effective for annual and interim periods beginning after December 15, 2017 and early adoption is permitted. The Company currently does not believe that the adoption of this standard will have a material impact on the Company’s financial position, results of operations and cash flows.

3 Marketable Securities

The Company’s marketable securities within cash equivalents and investments included in the consolidated balance sheets are detailed as follows (in thousands):

	December 31, 2017			Fair Value
	Amortized Cost	Unrealized Gain	Unrealized Loss	
U.S. Treasury securities	\$ 593,599	\$ 82	\$ (1,693)	\$ 591,988
Foreign government securities	6,982	—	(30)	6,952
Corporate debt securities	1,977,329	897	(3,066)	1,975,160
Time deposits	371,515	—	(4)	371,511
Equity securities	77	70	—	147
Total	<u>\$2,949,502</u>	<u>\$ 1,049</u>	<u>\$ (4,793)</u>	<u>\$2,945,758</u>
Amounts included in:				
Cash equivalents	\$ 194,377	\$ —	\$ (1)	\$ 194,376
Investments	2,755,125	1,049	(4,792)	2,751,382
Total	<u>\$2,949,502</u>	<u>\$ 1,049</u>	<u>\$ (4,793)</u>	<u>\$2,945,758</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	December 31, 2016			
	Amortized Cost	Unrealized Gain	Unrealized Loss	Fair Value
U.S. Treasury securities	\$ 570,695	\$ 253	\$ (635)	\$ 570,313
Foreign government securities	17,999	—	(8)	17,991
Corporate debt securities	1,645,468	496	(2,126)	1,643,838
Time deposits	199,906	—	—	199,906
Equity securities	77	70	—	147
Total	<u>\$2,434,145</u>	<u>\$ 819</u>	<u>\$ (2,769)</u>	<u>\$2,432,195</u>
Amounts included in:				
Cash equivalents	\$ 124,793	\$ 1	\$ —	\$ 124,794
Investments	<u>2,309,352</u>	<u>818</u>	<u>(2,769)</u>	<u>2,307,401</u>
Total	<u>\$2,434,145</u>	<u>\$ 819</u>	<u>\$ (2,769)</u>	<u>\$2,432,195</u>

The estimated fair value of marketable debt securities by maturity date is as follows (in thousands):

	December 31, 2017	December 31, 2016
Due in one year or less	\$ 1,722,553	\$ 1,388,537
Due after one year through three years	<u>851,547</u>	<u>843,605</u>
Total	<u>\$ 2,574,100</u>	<u>\$ 2,232,142</u>

Realized gains and losses on sales of investments were not material in 2017, 2016 and 2015.

4 Inventories

Inventories are classified as follows (in thousands):

	December 31,	
	2017	2016
Raw materials	\$ 99,033	\$ 95,430
Work in progress	15,324	16,585
Finished goods	<u>155,937</u>	<u>150,667</u>
Total inventories	<u>\$ 270,294</u>	<u>\$ 262,682</u>

During 2017, 2016 and 2015, the Company recorded inventory-related excess and obsolescence provisions of \$2 million, \$9 million and \$5 million, respectively.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

5 Property, Plant and Equipment

Property, plant and equipment consist of the following (in thousands):

	December 31,	
	2017	2016
Land and land improvements	\$ 37,525	\$ 35,720
Buildings and leasehold improvements	294,219	274,021
Production and other equipment	484,475	438,604
Construction in progress	22,140	20,204
Total property, plant and equipment	838,359	768,549
Less: accumulated depreciation and amortization	(489,081)	(431,431)
Property, plant and equipment, net	<u>\$ 349,278</u>	<u>\$ 337,118</u>

During 2017, 2016 and 2015, the Company retired and disposed of approximately \$15 million, \$15 million and \$29 million of property, plant and equipment, respectively, most of which was fully depreciated and no longer in use. Gains on disposal were immaterial for the years ended December 31, 2017 and 2016.

In February 2018, the Company's Board of Directors approved expanding its chemistry synthesis operations. The Company anticipates spending an estimated \$215 million to build and equip this new state-of-the-art manufacturing facility, which will be paid for with existing cash and investments. The Company does not expect to issue any debt in relation to this expansion.

6 Acquisitions

In September 2016, the Company acquired all of the outstanding stock of Rubotherm GmbH ("Rubotherm"), a manufacturer of gravimetric analysis systems, for approximately \$6 million in cash, \$5 million of which was paid at closing and an additional \$1 million paid after closing to settle certain liabilities. Rubotherm develops and manufactures analytical test instruments for thermogravimetric and sorption measurements that are used in both industrial and academic research laboratories in disciplines that include chemistry, material science and engineering. The Rubotherm acquisition will help support and further expand product offerings within TA's thermal analysis business.

In November 2015, the Company acquired all of the outstanding stock of MPE Orbur Group Limited and its sole operating subsidiary, Midland Precision Equipment Company, Ltd. ("MPE"), a manufacturer of MS instrumentation components, for \$12 million, net of cash acquired. MPE is a highly skilled manufacturer and former Waters supplier that produces critical components that support the Company's MS instrument systems. MPE was acquired to bring this key supplier in house to reduce manufacturing costs in the future and to reduce risk to our supply chain.

In the fourth quarter of 2015, the Company acquired certain assets of its Malaysian sales and service distributor for \$2 million in cash.

In May 2015, the Company acquired the net assets of the ElectroForce® business of the Bose Corporation ("ElectroForce"), a manufacturer of testing systems, for \$9 million in cash. ElectroForce's core business is the manufacturing of dynamic mechanical testing systems used to characterize medical devices, biologic and engineered materials. The ElectroForce test instruments are based on unique motor designs that are quiet, energy-efficient, scalable and deliver precise performance over a wide range of force and frequency. ElectroForce was acquired to expand TA's product offering into new markets, while leveraging the technology, infrastructure and customer bases of the combined organizations.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The principal factor that resulted in recognition of goodwill in these acquisitions is that the purchase price was based, in part, on cash flow projections assuming the integration of any acquired technology, distribution channels and products with the Company’s products, which is of considerably greater value than utilizing each of the acquired companies’ technology, customer access or products on a standalone basis. The goodwill also includes value assigned to assembled workforce, which cannot be recognized as an intangible asset. Specifically, the goodwill acquired with MPE consists of the value assigned to its workforce and the future incremental sales synergies anticipated.

In each acquisition, the sellers provided the Company with customary representations, warranties and indemnification, which would be settled in the future if and when a breach of the contractual representation or warranty condition occurs. The pro forma effect of the ongoing operations for Waters Corporation, Rubotherm, MPE, the Malaysian sales and service distributor and ElectroForce, either individually or in the aggregate, as though these acquisitions had occurred at the beginning of the periods covered by this report was immaterial.

7 Goodwill and Other Intangibles

The carrying amount of goodwill was \$360 million and \$352 million at December 31, 2017 and 2016, respectively. During the year ended December 31, 2017, the effect of foreign currency translation increased goodwill by \$8 million.

The Company’s intangible assets included in the consolidated balance sheets are detailed as follows (in thousands):

	December 31, 2017			December 31, 2016		
	Gross Carrying Amount	Accumulated Amortization	Weighted-Average Amortization Period	Gross Carrying Amount	Accumulated Amortization	Weighted-Average Amortization Period
Capitalized software	\$ 438,652	\$ 285,461	5 years	\$ 355,973	\$ 223,572	5 years
Purchased intangibles	169,870	138,750	11 years	162,180	127,045	11 years
Trademarks and IPR&D	13,923	—	—	13,544	—	—
Licenses	5,840	4,628	6 years	4,632	3,851	6 years
Patents and other intangibles	72,815	43,866	8 years	61,646	36,452	8 years
Total	<u>\$ 701,100</u>	<u>\$ 472,705</u>	7 years	<u>\$ 597,975</u>	<u>\$ 390,920</u>	7 years

The gross carrying value of intangible assets and accumulated amortization for intangible assets increased by \$58 million and \$38 million, respectively, in the year ended December 31, 2017 due to the effects of foreign currency translation. Amortization expense for intangible assets was \$45 million for each of the years ended December 31, 2017, 2016 and 2015. Amortization expense for intangible assets is estimated to be \$46 million per year for each of the next five years.

8 Debt

In November 2017, the Company entered into a new credit agreement (the “2017 Credit Agreement”) that provides for a \$1.5 billion revolving facility and a \$300 million term loan. The revolving facility and term loan both mature on November 30, 2022 and require no scheduled prepayments before that date. The Company used \$1.3 billion of the proceeds from the 2017 Credit Agreement to repay the outstanding amounts under the Company’s existing multi-borrower credit agreement dated June 2013 (the “2013 Credit Agreement”), which was terminated early without penalty. The Company plans to use future proceeds from the revolving facility for general corporate purposes.

The interest rates applicable to the 2017 Credit Agreement are, at the Company’s option, equal to either the alternate base rate (which is a rate per annum equal to the greatest of (a) the prime rate in effect on such day, (b) the Federal Reserve Bank of New York Rate on such day plus 1/2 of 1% per annum and (c) the adjusted LIBO

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

rate on such day (or if such day is not a business day, the immediately preceding business day) for a deposit in U.S. dollars with a maturity of one month plus 1% per annum) or the applicable 1, 2, 3 or 6 month adjusted LIBO rate or EURIBO rate for Euro-denominated loans, in each case, plus an interest rate margin based upon the Company's leverage ratio, which can range between 0 and 12.5 basis points for alternate base rate loans and between 80 and 112.5 basis points for LIBO rate or EURIBO rate loans. The facility fee on the 2017 Credit Agreement ranges between 7.5 and 25 basis points per annum, based on the leverage ratio, of the amount of the revolving facility commitments and the outstanding term loan. The 2017 Credit Agreement requires that the Company comply with an interest coverage ratio test of not less than 3.50:1 as of the end of any fiscal quarter for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, the 2017 Credit Agreement includes negative covenants, affirmative covenants, representations and warranties and events of default that are customary for investment grade credit facilities.

As of both December 31, 2017 and 2016, the Company had a total of \$700 million of outstanding senior unsecured notes. Interest on the fixed rate senior unsecured notes is payable semi-annually each year. Interest on the floating rate senior unsecured notes is payable quarterly. The Company may prepay all or some of the senior unsecured notes at any time in an amount not less than 10% of the aggregate principal amount outstanding, plus the applicable make-whole amount or prepayment premium for Series H and J senior unsecured notes. In the event of a change in control of the Company (as defined in the note purchase agreement), the Company may be required to prepay the senior unsecured notes at a price equal to 100% of the principal amount thereof, plus accrued and unpaid interest. These senior unsecured notes require that the Company comply with an interest coverage ratio test of not less than 3.50:1 for any period of four consecutive fiscal quarters and a leverage ratio test of not more than 3.50:1 as of the end of any fiscal quarter. In addition, these senior unsecured notes include customary negative covenants, affirmative covenants, representations and warranties and events of default.

The Company had the following outstanding debt at December 31, 2017 and 2016 (in thousands):

	December 31,	
	2017	2016
Foreign subsidiary lines of credit	\$ 273	\$ 297
Senior unsecured notes - Series D - 3.22%, due March 2018	100,000	—
Credit agreement	—	125,000
Total notes payable and debt, current	<u>100,273</u>	<u>125,297</u>
Senior unsecured notes - Series B - 5.00%, due February 2020	100,000	100,000
Senior unsecured notes - Series D - 3.22%, due March 2018	—	100,000
Senior unsecured notes - Series E - 3.97%, due March 2021	50,000	50,000
Senior unsecured notes - Series F - 3.40%, due June 2021	100,000	100,000
Senior unsecured notes - Series G - 3.92%, due June 2024	50,000	50,000
Senior unsecured notes - Series H - floating rate*, due June 2024	50,000	50,000
Senior unsecured notes - Series I - 3.13%, due May 2023	50,000	50,000
Senior unsecured notes - Series J - floating rate**, due May 2024	40,000	40,000
Senior unsecured notes - Series K - 3.44%, due May 2026	160,000	160,000
Credit agreement	1,300,000	1,005,000
Unamortized debt issuance costs	(2,499)	(3,034)
Total long-term debt	<u>1,897,501</u>	<u>1,701,966</u>
Total debt	<u>\$1,997,774</u>	<u>\$1,827,263</u>

* Series H senior unsecured notes bear interest at a 3-month LIBOR for that floating rate interest period plus 1.25%.

** Series J senior unsecured notes bear interest at a 3-month LIBOR for that floating rate interest period plus 1.45%.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

As of December 31, 2017 and 2016, the Company had a total amount available to borrow under existing credit agreements of \$498 million and \$468 million, respectively, after outstanding letters of credit. The weighted-average interest rates applicable to the senior unsecured notes and credit agreement borrowings collectively were 2.98% and 2.55% at December 31, 2017 and 2016, respectively. As of December 31, 2017, the Company was in compliance with all debt covenants.

The Company and its foreign subsidiaries also had available short-term lines of credit totaling \$91 million and \$79 million at December 31, 2017 and 2016, respectively, for the purpose of short-term borrowing and issuance of commercial guarantees. At December 31, 2017 and 2016, the weighted-average interest rates applicable to these short-term borrowings were 1.48% and 1.49%, respectively.

Annual maturities of debt outstanding at December 31, 2017 are as follows (in thousands):

	<u>Total</u>
2018	\$ 100,273
2019	—
2020	100,000
2021	150,000
2022	1,300,000
Thereafter	350,000
Total	<u>\$2,000,273</u>

9 Income Taxes

Income tax data for the years ended December 31, 2017, 2016 and 2015 is as follows (in thousands):

	<u>Year Ended December 31,</u>		
	<u>2017</u>	<u>2016</u>	<u>2015</u>
The components of income from operations before income taxes are as follows:			
Domestic	\$ 55,751	\$ 35,154	\$ 66,716
Foreign	585,346	564,960	475,203
Total	<u>\$641,097</u>	<u>\$600,114</u>	<u>\$541,919</u>

	<u>Year Ended December 31,</u>		
	<u>2017</u>	<u>2016</u>	<u>2015</u>
The current and deferred components of the provision for income taxes on operations are as follows:			
Current	\$575,276	\$77,407	\$66,285
Deferred	45,510	1,204	6,581
Total	<u>\$620,786</u>	<u>\$78,611</u>	<u>\$72,866</u>
The jurisdictional components of the provision for income taxes on operations are as follows:			
Federal	\$535,777	\$19,693	\$20,882
State	26,561	3,090	3,389
Foreign	58,448	55,828	48,595
Total	<u>\$620,786</u>	<u>\$78,611</u>	<u>\$72,866</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The U.S. enacted the Tax Cuts and Jobs Act (the “2017 Tax Act”) on December 22, 2017 (“Enactment Date”).

The 2017 Tax Act contains several key provisions including, but not limited to the following:

- A one-time tax on the mandatory deemed repatriation of pre-2018 foreign earnings and profits (“E&P”), referred to as the toll charge;
- Reduction in the Corporate tax rate from 35% to 21% for tax years beginning after December 31, 2017;
- Introduction of a new U.S. tax on certain off-shore earnings referred to as Global Intangible Low-Taxed Income (“GILTI”) at an effective tax rate of 10.5% for tax years beginning after December 31, 2017 (increasing to 13.125% for tax years beginning after December 31, 2025) with a partial offset by foreign tax credits; and
- Introduction of a territorial tax system beginning in 2018 by providing a 100% dividends received deduction on certain qualified dividends from foreign subsidiaries.

During the fourth quarter of 2017, we recorded an incremental income tax provision of \$550 million, which is comprised of the following:

- An estimated income tax provision of \$490 million for the one-time deemed repatriation of pre-2018 E&P. In accordance with the 2017 Tax Act, the toll charge liability may be paid over eight years. As such, we have recorded \$450 million and \$40 million in long-term income tax liabilities and accrued income taxes (current), respectively, as of December 31, 2017;
- An estimated net income tax provision of \$20 million, for the remeasurement of our deferred tax assets and liabilities at the newly enacted tax rate of 21%; and
- As a result of the 2017 Tax Act and the Company’s expectations about distributing certain cash balances from its foreign subsidiaries to the U.S., the Company also recorded estimated income tax provisions for estimated state income taxes and foreign withholding taxes of \$40 million.

The \$550 million income tax provision recorded was based on currently available information and interpretations of applying the provisions of the 2017 Tax Act as of the time of filing this Annual Report on Form 10-K. In accordance with authoritative guidance issued by the Securities and Exchange Commission (“SEC”), the income tax effect of the 2017 Tax Act represent provisional amounts for which our accounting is incomplete but for which reasonable estimates were determined and recorded during the fourth quarter of 2017. The guidance provides for a measurement period, up to one year from the Enactment Date, in which provisional amounts may be adjusted when additional information is obtained, prepared and analyzed. Adjustments to provisional amounts identified during the measurement period should be recorded as an income tax provision or benefit in the period the adjustment is determined.

We continue to evaluate the impacts of the 2017 Tax Act and consider the amounts recorded to be provisional. In addition, we are still evaluating the GILTI provisions of the 2017 Tax Act and its impact, if any, on our consolidated financial statements as of December 31, 2017. Companies are allowed to adopt an accounting policy to either recognize deferred taxes for GILTI or treat such as a tax cost in the year incurred. We have not yet determined our accounting policy because determining the impact of the GILTI provisions requires additional analysis. As such, we did not record a deferred income tax expense or benefit related to the GILTI provisions in our consolidated statement of operations for the year ended December 31, 2017 and we will finalize this analysis and determination during the measurement period.

The Company recorded a provisional amount for its toll charge, which represents its reasonable estimate of the liability due for the mandatory deemed repatriation of its foreign E&P. Determining the provisional toll

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

charge liability required a significant effort based on a number of estimates and factors that need to be further analyzed and finalized including, but not limited to, the following:

- Analyzing our accumulated foreign E&P and related foreign tax pools, including historical practices and assertions made in determining such; and
- Determining the composition, including intercompany receivables and payables of specified foreign corporations, of our foreign E&P that is held in cash or liquid assets and other assets at several measurement dates, as a different tax rate is applied to each when determining the toll charge liability.

For the aforementioned factors as well as the proximity of the enactment of the 2017 Tax Act to our year-end, we had limited time to analyze the 2017 Tax Act and its various interpretations including any additional guidance issued through the time of filing this Annual Report on Form 10-K, to assess how to apply the new law to our specific facts and circumstances and determine the toll charge that we expect to include in our 2017 tax return. We made certain assumptions and estimates in determining the provisional toll charge that may result in adjustments when we finalize our analysis and accounting for the 2017 Tax Act.

Certain income tax effects of the 2017 Tax Act represent provisional amounts for which our analysis is incomplete but for which reasonable estimates were determined and recorded during the fourth quarter of 2017. Our actual results may materially differ from our current estimates due to, among other things, further guidance that may be issued by U.S. federal or state tax authorities to interpret the 2017 Tax Act, or guidance from the SEC or FASB regarding income tax accounting matters related to the 2017 Tax Act. We will continue to analyze the 2017 Tax Act and any additional guidance that may be issued so we can finalize the tax effects of the 2017 Tax Act on our financial statements in the measurement period.

At December 31, 2017, as a result of the 2017 Tax Act deemed repatriation and plans to distribute certain cash balances from its foreign subsidiaries to the U.S., we have recorded state and foreign withholding taxes on the unremitted earnings of our foreign subsidiaries. The Company continues to be indefinitely reinvested in relation to the cumulative historical outside basis difference not related to the unremitted earnings that were taxed. We will continue to evaluate our assertions, including intentions and plans, on the cumulative historical outside basis differences, not related to the unremitted earnings that were taxed, in our foreign subsidiaries as of December 31, 2017. We expect to finalize our analysis and accounting related to the toll charge, deferred tax assets and liabilities and any remaining outside basis differences in our foreign subsidiaries during the measurement period. The determination of the unrecognized deferred tax liability on cumulative historical outside basis differences that are not related to the unremitted earnings that were taxed is not practicable.

	Year Ended December 31,		
	2017	2016	2015
The differences between income taxes computed at the United States statutory rate and the provision for income taxes are summarized as follows:			
Federal tax computed at U.S. statutory income tax rate	\$ 224,384	\$ 210,040	\$ 189,672
2017 Tax Act	550,000	—	—
Settlement of tax audits	706	345	(3,258)
State income tax, net of federal income tax benefit	1,289	2,008	2,601
Net effect of foreign operations	(134,117)	(133,518)	(112,426)
Effect of stock-based compensation	(19,566)	—	—
Other, net	(1,910)	(264)	(3,723)
Provision for income taxes	<u>\$ 620,786</u>	<u>\$ 78,611</u>	<u>\$ 72,866</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The four principal jurisdictions in which the Company manufactures are the U.S., Ireland, the U.K. and Singapore, where the marginal effective tax rates were approximately 37.5%, 12.5%, 19.25% and 0%, respectively, as of December 31, 2017. The Company has a contractual tax rate of 0% on qualifying activities in Singapore through March 2021, based upon the achievement of certain contractual milestones, which the Company expects to continue to meet. The current statutory tax rate in Singapore is 17%. The effect of applying the contractual tax rate rather than the statutory tax rate to income from qualifying activities in Singapore increased the Company's net income in 2017, 2016 and 2015 by \$25 million, \$23 million and \$20 million, respectively and increased the Company's net income per diluted share by \$0.31, \$0.29 and \$0.25, respectively.

The Company's effective tax rates for the years ended December 31, 2017, 2016 and 2015 were 96.8%, 13.1% and 13.4%, respectively. The provision for income taxes for 2017 includes a \$550 million estimate for the impact of the 2017 Tax Act. In addition, the effective tax rate in 2017 includes the adoption of new accounting guidance related to stock-based compensation, which decreased income tax expense by \$20 million and decreased the Company's effective tax rate by 3.1 percentage points. See Note 2 for further information regarding the adoption of this standard.

The income tax provision for 2016 included a \$3 million tax benefit related to a release of a valuation allowance on certain net operating loss carryforwards. In 2015, the income tax provision included a \$3 million tax benefit related to the completion of tax audit examinations. The remaining differences between effective tax rates can primarily be attributed to differences in the proportionate amounts of pre-tax income recognized in jurisdictions with different effective tax rates.

The tax effects of temporary differences and carryforwards which give rise to deferred tax assets and deferred tax liabilities are summarized as follows (in thousands):

	December 31,	
	2017	2016
Deferred tax assets:		
Net operating losses and credits	\$ 75,630	\$ 76,027
Depreciation	5,952	8,310
Stock-based compensation	9,815	19,609
Deferred compensation	21,434	24,813
Revaluation of equity investments and licenses	3,465	4,707
Inventory	4,864	5,235
Accrued liabilities and reserves	8,230	8,814
Other	11,873	15,948
Total deferred tax assets	141,263	163,463
Valuation allowance	(62,098)	(61,225)
Deferred tax assets, net of valuation allowance	79,165	102,238
Deferred tax liabilities:		
Capitalized software	(19,630)	(15,323)
Amortization	(3,394)	(5,115)
Indefinite-lived intangibles	(13,254)	(19,680)
Deferred tax liability on foreign earnings	(21,000)	—
Total deferred tax liabilities	(57,278)	(40,118)
Net deferred tax assets	<u>\$ 21,887</u>	<u>\$ 62,120</u>

As of December 31, 2017, the Company has provided a deferred tax valuation allowance of \$62 million, of which \$59 million relates to certain foreign net operating losses. The Company's net deferred tax assets

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

associated with net operating losses and tax credit carryforwards are approximately \$17 million as of December 31, 2017, which represent the future tax benefit of foreign net operating loss carryforwards that do not expire under current law.

As a result of the adoption of new accounting guidance related to stock-based compensation, the Company no longer records excess tax benefits related to stock-based compensation in equity. The income tax benefits associated with equity compensation expense recognized for tax purposes and credited to additional paid-in capital were \$14 million and \$13 million for the years ended December 31, 2016 and 2015, respectively.

The Company accounts for its uncertain tax return reporting positions in accordance with the accounting standards for income taxes, which require financial statement reporting of the expected future tax consequences of uncertain tax reporting positions on the presumption that all concerned tax authorities possess full knowledge of those tax reporting positions, as well as all of the pertinent facts and circumstances, but prohibit any discounting of unrecognized tax benefits associated with those reporting positions for the time value of money. The Company continues to classify interest and penalties related to unrecognized tax benefits as a component of the provision for income taxes.

The following is a summary of the activity of the Company's unrecognized tax benefits for the years ended December 31, 2017, 2016 and 2015 (in thousands):

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Balance at the beginning of the period	\$ 9,964	\$14,450	\$19,596
Changes resulting from completion of tax examinations	—	(828)	(2,405)
Other changes in uncertain tax benefits	(4,121)	(3,658)	(2,741)
Balance at the end of the period	<u>\$ 5,843</u>	<u>\$ 9,964</u>	<u>\$14,450</u>

With limited exceptions, the Company is no longer subject to tax audit examinations in significant jurisdictions for the years ended on or before December 31, 2012. However, carryforward tax attributes that were generated in years beginning on or before January 1, 2013 may still be adjusted upon examination by tax authorities if the attributes are utilized. The Company continuously monitors the lapsing of statutes of limitations on potential tax assessments for related changes in the measurement of unrecognized tax benefits, related net interest and penalties, and deferred tax assets and liabilities.

During the year ended December 31, 2016, the Company concluded tax audit disputes outside the U.S. that, in part, related to matters for which the Company had recorded net uncertain tax benefits. The resolution of these tax disputes resulted in a \$1 million reduction in the measurement of its unrecognized tax benefits for the year ended December 31, 2016.

During the year ended December 31, 2015, the Company concluded U.S. tax audit disputes that, in part, related to matters for which the Company had recorded net uncertain tax benefits. The resolution of these tax disputes resulted in a \$2 million reduction in the measurement of its unrecognized tax benefits and a \$2 million decrease in its provision for income taxes for the year ended December 31, 2015.

As of December 31, 2017, the Company expects to record additional reductions in the measurement of its unrecognized tax benefits and related net interest and penalties of approximately \$1 million within the next twelve months due to potential tax audit settlements and the lapsing of statutes of limitations on potential tax assessments. The Company does not expect to record any other material reductions in the measurement of its unrecognized tax benefits within the next twelve months.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)**10 Litigation**

From time to time, the Company and its subsidiaries are involved in various litigation matters arising in the ordinary course of business. The Company believes it has meritorious arguments in its current litigation matters and believes any outcome, either individually or in the aggregate, will not be material to the Company's financial position, results of operations or cash flows. During 2017, 2016 and 2015, the Company recorded \$11 million, \$4 million and \$4 million of litigation settlement provisions and related costs, respectively. The accrued patent litigation expense is in other current liabilities in the consolidated balance sheets at December 31, 2017 and 2016.

11 Other Commitments and Contingencies

Lease agreements, expiring at various dates through 2031, cover buildings, office equipment and automobiles. Rental expense was \$27 million, \$28 million and \$27 million for the years ended December 31, 2017, 2016 and 2015, respectively. Future minimum rents payable as of December 31, 2017 under non-cancelable leases with initial terms exceeding one year are as follows (in thousands):

2018	\$23,168
2019	18,228
2020	14,122
2021	8,652
2022 and thereafter	<u>25,512</u>
Total	<u>\$89,682</u>

The Company licenses certain technology and software from third parties. Future minimum license fees payable under existing license agreements as of December 31, 2017 are immaterial for the years ended December 31, 2018 and thereafter. The Company enters into licensing arrangements with third parties that require future milestone or royalty payments contingent upon future events. Upon the achievement of certain milestones in existing agreements, the Company could make additional future payments of up to \$7 million, as well as royalties on future net sales.

The Company enters into standard indemnification agreements in its ordinary course of business. Pursuant to these agreements, the Company indemnifies, holds harmless and agrees to reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally the Company's business partners or customers, in connection with patent, copyright or other intellectual property infringement claims by any third party with respect to its current products, as well as claims relating to property damage or personal injury resulting from the performance of services by the Company or its subcontractors. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited. Historically, the Company's costs to defend lawsuits or settle claims relating to such indemnity agreements have been minimal and management accordingly believes the estimated fair value of these agreements is immaterial.

12 Stock-Based Compensation

In May 2012, the Company's shareholders approved the Company's 2012 Equity Incentive Plan ("2012 Plan"). As of December 31, 2017, the 2012 Plan has 2.7 million shares available for grant in the form of incentive or non-qualified stock options, stock appreciation rights ("SARs"), restricted stock, restricted stock units, performance stock units or other types of awards. The Company issues new shares of common stock upon exercise of stock options, restricted stock unit conversion or performance stock unit conversion. Under the 2012 Plan, the exercise price for stock options may not be less than the fair market value of the underlying stock at the date of grant. The 2012 Plan is scheduled to terminate on May 9, 2022. Options generally will expire no later than ten years after the date on which they are granted and will become exercisable as directed by the

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Compensation Committee of the Board of Directors and generally vest in equal annual installments over a five-year period. A SAR may be granted alone or in conjunction with an option or other award. Shares of restricted stock, and restricted stock units and performance stock units may be issued under the 2012 Plan for such consideration as is determined by the Compensation Committee of the Board of Directors. As of December 31, 2017, the Company had stock options, restricted stock and restricted and performance stock unit awards outstanding.

In May 2009, the Company's shareholders approved the 2009 Employee Stock Purchase Plan under which eligible employees may contribute up to 15% of their earnings toward the quarterly purchase of the Company's common stock. The plan makes available 0.9 million shares of the Company's common stock, which includes the remaining shares available under the 1996 Employee Stock Purchase Plan. As of December 31, 2017, 1.4 million shares have been issued under both the 2009 and 1996 Employee Stock Purchase Plans. Each plan period lasts three months beginning on January 1, April 1, July 1 and October 1 of each year. The purchase price for each share of stock is the lesser of 90% of the market price on the first day of the plan period or 100% of the market price on the last day of the plan period. Stock-based compensation expense related to this plan was \$1 million for each of the years ended December 31, 2017, 2016 and 2015, respectively.

The Company accounts for stock-based compensation costs in accordance with the accounting standards for stock-based compensation, which require that all share-based payments to employees be recognized in the statements of operations based on their grant date fair values. The Company recognizes the expense using the straight-line attribution method. The stock-based compensation expense recognized in the consolidated statements of operations is based on awards that ultimately are expected to vest; therefore, the amount of expense has been reduced for estimated forfeitures. The new stock-based compensation accounting guidance offers the option of recognizing forfeitures as they occur or estimating forfeitures at the time of grant and, if necessary, revising in subsequent periods if actual forfeitures differ from those estimates. The Company has elected to remain consistent with prior periods and estimate forfeitures at the time of grant and, if necessary, revise in subsequent periods in which actual forfeitures differ from those estimates. Forfeitures are estimated based on historical experience. If actual results differ significantly from these estimates, stock-based compensation expense and the Company's results of operations could be materially impacted. In addition, if the Company employs different assumptions in the application of these standards, the compensation expense that the Company records in the future periods may differ significantly from what the Company has recorded in the current period.

The consolidated statements of operations for the years ended December 31, 2017, 2016 and 2015 include the following stock-based compensation expense related to stock option awards, restricted stock awards, restricted stock unit awards, performance stock unit awards and the employee stock purchase plan (in thousands):

	2017	2016	2015
Cost of sales	\$ 3,032	\$ 2,738	\$ 2,590
Selling and administrative expenses	33,335	34,451	26,431
Research and development expenses	3,069	3,809	4,347
Total stock-based compensation	<u>\$39,436</u>	<u>\$40,998</u>	<u>\$33,368</u>

During the years ended December 31, 2017 and 2016, the Company recognized \$4 million and \$7 million, respectively, of stock compensation expense related to the modification of certain stock awards upon the retirement of senior executives.

Stock Options

In determining the fair value of the stock options, the Company makes a variety of assumptions and estimates, including volatility measures, expected yields and expected stock option lives. The fair value of each option grant

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

was estimated on the date of grant using the Black-Scholes option pricing model. The Company uses implied volatility on its publicly-traded options as the basis for its estimate of expected volatility. The Company believes that implied volatility is the most appropriate indicator of expected volatility because it is generally reflective of historical volatility and expectations of how future volatility will differ from historical volatility. The expected life assumption for grants is based on historical experience for the population of non-qualified stock option exercises. The risk-free interest rate is the yield currently available on U.S. Treasury zero-coupon issues with a remaining term approximating the expected term used as the input to the Black-Scholes model. The relevant data used to determine the value of the stock options granted during 2017, 2016 and 2015 are as follows:

<u>Options Issued and Significant Assumptions Used to Estimate Option Fair Values</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Options issued in thousands	389	324	673
Risk-free interest rate	2.2%	1.9%	1.8%
Expected life in years	6	6	6
Expected volatility	0.227	0.247	0.257
Expected dividends	—	—	—

<u>Weighted-Average Exercise Price and Fair Value of Options on the Date of Grant</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>
Exercise price	\$ 170.24	\$ 135.02	\$ 127.63
Fair value	\$ 45.73	\$ 37.44	\$ 35.84

The following table summarizes stock option activity for the plans for the year ended December 31, 2017 (in thousands, except per share data):

	<u>Number of Shares</u>	<u>Exercise Price per Share</u>	<u>Weighted-Average Exercise Price</u>
Outstanding at December 31, 2016	2,697	\$ 38.09 to \$139.51	\$ 106.55
Granted	389	\$136.43 to \$194.26	\$ 170.24
Exercised	(972)	\$ 41.20 to \$139.51	\$ 93.49
Canceled	(75)	\$ 87.06 to \$139.51	\$ 120.59
Outstanding at December 31, 2017	<u>2,039</u>	\$ 38.09 to \$194.26	\$ 124.41

The following table details the options outstanding at December 31, 2017 by range of exercise prices (in thousands, except per share data):

<u>Exercise Price Range</u>	<u>Number of Shares Outstanding</u>	<u>Weighted-Average Exercise Price</u>	<u>Remaining Contractual Life of Options Outstanding</u>	<u>Number of Shares Exercisable</u>	<u>Weighted-Average Exercise Price</u>
\$38.09 to \$79.99	157	\$ 67.58	2.7	157	\$ 67.58
\$80.00 to \$113.36	642	\$ 103.01	6.2	391	\$ 98.74
\$113.37 to \$194.26	1,240	\$ 142.69	8.6	307	\$ 128.26
Total	<u>2,039</u>	\$ 124.41	7.4	<u>855</u>	\$ 103.63

During 2017, 2016 and 2015, the total intrinsic value of the stock options exercised (i.e., the difference between the market price at exercise and the price paid by the employee to exercise the options) was \$76 million, \$53 million and \$48 million, respectively. The total cash received from the exercise of these stock options was \$91 million, \$56 million and \$47 million for the years ended December 31, 2017, 2016 and 2015, respectively.

The aggregate intrinsic value of the outstanding stock options at December 31, 2017 was \$140 million. Options exercisable at December 31, 2017, 2016 and 2015 were 0.9 million, 1.3 million and 1.5 million,

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

respectively. The weighted-average exercise prices of options exercisable at December 31, 2017, 2016 and 2015 were \$103.63, \$92.26 and \$80.71, respectively. The weighted-average remaining contractual life of the exercisable outstanding stock options at December 31, 2017 was 5.6 years.

At December 31, 2017, the Company had 2 million stock options that are vested and expected to vest. The intrinsic value, weighted-average exercise price and remaining contractual life of the vested and expected to vest stock options were \$137 million, \$124.18 and 7.2 years, respectively, at December 31, 2017.

As of December 31, 2017, there were \$42 million of total unrecognized compensation costs related to unvested stock option awards that are expected to vest. These costs are expected to be recognized over a weighted-average period of 3.5 years.

Restricted Stock

During the years ended December 31, 2017, 2016 and 2015, the Company granted 8 thousand, 8 thousand and 10 thousand shares of restricted stock, respectively. The weighted-average fair value per share on the grant date of the restricted stock granted in 2017, 2016 and 2015 was \$140.10, \$130.35 and \$113.88, respectively. The Company has recorded \$1 million of compensation expense in each of the years ended December 31, 2017, 2016 and 2015 related to the restricted stock grants. As of December 31, 2017, the Company had 6 thousand unvested shares of restricted stock outstanding, which have been fully expensed.

Restricted Stock Units

The following table summarizes the unvested restricted stock unit award activity for the year ended December 31, 2017 (in thousands, except for per share amounts):

	Shares	Weighted-Average Fair Value
Unvested at December 31, 2016	453	\$ 110.34
Granted	107	\$ 154.60
Vested	(164)	\$ 105.02
Forfeited	(22)	\$ 119.27
Unvested at December 31, 2017	<u>374</u>	<u>\$ 124.81</u>

Restricted stock units are generally granted annually in February and vest in equal annual installments over a five-year period. The amount of compensation costs recognized for the years ended December 31, 2017, 2016 and 2015 on the restricted stock units expected to vest were \$17 million, \$17 million and \$16 million, respectively. As of December 31, 2017, there were \$32 million of total unrecognized compensation costs related to the restricted stock unit awards that are expected to vest. These costs are expected to be recognized over a weighted-average period of 3.0 years.

Performance Stock Units

During year ended December 31, 2017, the Company issued performance stock units, which are equity compensation awards with a market vesting condition based on the Company's Total Shareholder Return ("TSR") relative to the TSR of the components of the S&P Health Care Index. TSR is the change in value of a stock price over time, including the reinvestment of dividends. The vesting schedule ranges from 0% to 200% of the target shares awarded.

In determining the fair value of the performance stock units, the Company makes a variety of assumptions and estimates, including volatility measures, expected yields and expected terms. The fair value of each

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

performance stock unit grant was estimated on the date of grant using the Monte Carlo simulation model. The Company uses implied volatility on its publicly-traded options as the basis for its estimate of expected volatility. The Company believes that implied volatility is the most appropriate indicator of expected volatility because it is generally reflective of historical volatility and expectations of how future volatility will differ from historical volatility. The expected life assumption for grants is based on the performance period of the underlying performance stock units. The risk-free interest rate is the yield currently available on U.S. Treasury zero-coupon issues with a remaining term approximating the expected term used as the input to the Monte Carlo simulation model. The correlation coefficient is used to model the way in which each company in the S&P Health Care Index tends to move in relation to each other during the performance period. The relevant data used to determine the value of the performance stock units granted during 2017 are as follows:

<u>Performance Stock Units Issued and Significant Assumptions Used to Estimate Fair Values</u>	<u>2017</u>
Performance stock units issued in thousands	40
Risk-free interest rate	1.6%
Expected life in years	3.0
Expected volatility	0.209
Average volatility of peer companies	0.256
Correlation Coefficient	0.378
Expected dividends	—

The following table summarizes the unvested performance stock unit award activity for the year ended December 31, 2017 (in thousands, except for per share amounts):

	<u>Shares</u>	<u>Weighted-Average Fair Value</u>
Unvested at December 31, 2016	27	\$ 171.16
Granted	40	\$ 210.25
Forfeited	(3)	\$ 156.25
Unvested at December 31, 2017	<u>64</u>	<u>\$ 196.29</u>

The amount of compensation costs recognized for the years ended December 31, 2017 and 2016 on the performance stock units expected to vest were \$2 million and less than \$1 million, respectively. As of December 31, 2017, there were \$10 million of total unrecognized compensation costs related to the restricted stock unit awards that are expected to vest. These costs are expected to be recognized over a weighted-average period of 2.5 years.

13 Earnings Per Share

Basic and diluted EPS calculations are detailed as follows (in thousands, except per share data):

	<u>Year Ended December 31, 2017</u>		
	<u>Net Income (Numerator)</u>	<u>Weighted-Average Shares (Denominator)</u>	<u>Per Share Amount</u>
Net income per basic common share	\$ 20,311	79,793	\$ 0.25
Effect of dilutive stock option, restricted stock, performance stock unit and restricted stock unit securities	—	811	—
Net income per diluted common share	<u>\$ 20,311</u>	<u>80,604</u>	<u>\$ 0.25</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

	Year Ended December 31, 2016		
	Net Income (Numerator)	Weighted-Average Shares (Denominator)	Per Share Amount
Net income per basic common share	\$521,503	80,786	\$ 6.46
Effect of dilutive stock option, restricted stock, performance stock unit and restricted stock unit securities	—	631	(0.05)
Net income per diluted common share	<u>\$521,503</u>	<u>81,417</u>	<u>\$ 6.41</u>

	Year Ended December 31, 2015		
	Net Income (Numerator)	Weighted-Average Shares (Denominator)	Per Share Amount
Net income per basic common share	\$469,053	82,336	\$ 5.70
Effect of dilutive stock option, restricted stock and restricted stock unit securities	—	751	(0.05)
Net income per diluted common share	<u>\$469,053</u>	<u>83,087</u>	<u>\$ 5.65</u>

For the years ended December 31, 2017, 2016 and 2015, the Company had 0.4 million, 0.9 million and 1.2 million stock options that were antidilutive, respectively, due to having higher exercise prices than the Company's average stock price during the period. These securities were not included in the computation of diluted EPS. The effect of dilutive securities was calculated using the treasury stock method.

14 Accumulated Other Comprehensive Income

The components of accumulated other comprehensive income are detailed as follows (in thousands):

	Currency Translation	Unrealized Gain (Loss) on Retirement Plans	Unrealized Gain (Loss) on Investments	Accumulated Other Comprehensive Income (Loss)
Balance at December 31, 2016	\$(170,566)	\$ (43,894)	\$ (1,820)	\$ (216,280)
Other comprehensive income (loss), net of tax	101,148	6,791	(1,726)	106,213
Balance at December 31, 2017	<u>\$ (69,418)</u>	<u>\$ (37,103)</u>	<u>\$ (3,546)</u>	<u>\$ (110,067)</u>

15 Retirement Plans

U.S. employees are eligible to participate in the Waters Employee Investment Plan, a 401(k) defined contribution plan, immediately upon hire. Employees may contribute up to 60% of eligible pay on a pre-tax or post-tax basis and the Company makes matching contributions of 100% for contributions up to 6% of eligible pay. The Company also sponsors a 401(k) Restoration Plan, which is a nonqualified defined contribution plan. Employees are 100% vested in employee and Company matching contributions for both plans. For the years ended December 31, 2017, 2016 and 2015, the Company's matching contributions amounted to \$16 million, \$15 million and \$14 million, respectively.

The Company maintains two defined benefit plans in the U.S. for which the pay credit accruals have been frozen, the Waters Retirement Plan and the Waters Retirement Restoration Plan (collectively, the "U.S. Pension Plans"). The Company also sponsors other employee benefit plans in the U.S., including a retiree healthcare plan, which provides reimbursement for medical expenses and is contributory. There are various employee benefit

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

plans outside the United States (both defined benefit and defined contribution plans). Certain non-U.S. defined benefit plans (“Non-U.S. Pension Plans”) are included in the disclosures below, which are required under the accounting standards for retirement benefits.

The Company contributed \$12 million, \$12 million and \$11 million in the years ended December 31, 2017, 2016 and 2015, respectively, to the non-U.S. plans (primarily defined contribution plans) which are currently outside of the scope of the required disclosures. The eligibility and vesting of non-U.S. plans are consistent with local laws and regulations.

The net periodic pension cost is made up of several components that reflect different aspects of the Company’s financial arrangements as well as the cost of benefits earned by employees. These components are determined using the projected unit credit actuarial cost method and are based on certain actuarial assumptions. The Company’s accounting policy is to reflect in the projected benefit obligation all benefit changes to which the Company is committed as of the current valuation date; use a market-related value of assets to determine pension expense; amortize increases in prior service costs on a straight-line basis over the expected future service of active participants as of the date such costs are first recognized; and amortize cumulative actuarial gains and losses in excess of 10% of the larger of the market-related value of plan assets and the projected benefit obligation over the expected future service of active participants.

Summary data for the U.S. Pension Plans, U.S. Retiree Healthcare Plan and Non-U.S. Pension Plans are presented in the following tables, using the measurement dates of December 31, 2017 and 2016, respectively.

The reconciliation of the projected benefit obligations for the plans at December 31, 2017 and 2016 is as follows (in thousands):

	2017			2016		
	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans
Projected benefit obligation, January 1	\$159,416	\$14,921	\$85,311	\$155,003	\$12,963	\$75,677
Service cost	450	546	5,082	377	473	4,954
Employee contributions	—	1,041	605	—	987	584
Interest cost	6,829	618	1,518	6,931	557	1,699
Actuarial losses (gains)	8,658	942	(2,590)	2,338	586	6,510
Benefits paid	(5,058)	(947)	(2,078)	(5,233)	(645)	(2,141)
Plan amendments	—	—	636	—	—	—
Plan settlements	(2,231)	—	(1,229)	—	—	—
Other plans	—	—	196	—	—	1,305
Currency impact	—	—	8,927	—	—	(3,277)
Projected benefit obligation, December 31	<u>\$168,064</u>	<u>\$17,121</u>	<u>\$96,378</u>	<u>\$159,416</u>	<u>\$14,921</u>	<u>\$85,311</u>

The accumulated benefit obligations for the plans at December 31, 2017 and 2016 are as follows (in thousands):

	2017			2016		
	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans
Accumulated benefit obligation	\$168,064	**	\$82,615	\$159,416	**	\$72,618

** Not applicable.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The reconciliation of the fair value of the plan assets at December 31, 2017 and 2016 is as follows (in thousands):

	2017			2016		
	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans
Fair value of plan assets, January 1	\$ 144,665	\$ 9,142	\$ 65,548	\$ 136,128	\$ 8,001	\$ 60,441
Actual return on plan assets	27,729	1,542	390	8,621	510	4,741
Company contributions	6,162	347	4,733	5,149	289	4,579
Employee contributions	—	1,041	605	—	987	584
Plan settlements	(2,125)	—	(915)	—	—	—
Benefits paid	(5,058)	(947)	(2,078)	(5,233)	(645)	(2,141)
Other plans	—	—	(213)	—	—	262
Currency impact	—	—	6,920	—	—	(2,918)
Fair value of plan assets, December 31	<u>\$ 171,373</u>	<u>\$ 11,125</u>	<u>\$ 74,990</u>	<u>\$ 144,665</u>	<u>\$ 9,142</u>	<u>\$ 65,548</u>

The summary of the funded status for the plans at December 31, 2017 and 2016 is as follows (in thousands):

	2017			2016		
	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans
Projected benefit obligation	\$ (168,064)	\$ (17,121)	\$ (96,378)	\$ (159,416)	\$ (14,921)	\$ (85,311)
Fair value of plan assets	171,373	11,125	74,990	144,665	9,142	65,548
Funded status	<u>\$ 3,309</u>	<u>\$ (5,996)</u>	<u>\$ (21,388)</u>	<u>\$ (14,751)</u>	<u>\$ (5,779)</u>	<u>\$ (19,763)</u>

The summary of the amounts recognized in the consolidated balance sheets for the plans at December 31, 2017 and 2016 is as follows (in thousands):

	2017			2016		
	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans
Long-term assets	\$ 4,562	\$ —	\$ 1,245	\$ —	\$ —	\$ 1,084
Current liabilities	(76)	(347)	—	(1,343)	(289)	—
Long-term liabilities	(1,177)	(5,649)	(22,633)	(13,408)	(5,490)	(20,847)
Net amount recognized at December 31	<u>\$ 3,309</u>	<u>\$ (5,996)</u>	<u>\$ (21,388)</u>	<u>\$ (14,751)</u>	<u>\$ (5,779)</u>	<u>\$ (19,763)</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The summary of the components of net periodic pension costs for the plans for the years ended December 31, 2017, 2016 and 2015 is as follows (in thousands):

	2017			2016			2015		
	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans
Service cost	\$ 450	\$ 546	\$ 5,082	\$ 377	\$ 473	\$ 4,954	\$ —	\$ 577	\$ 5,087
Interest cost	6,829	618	1,518	6,931	557	1,699	6,128	470	1,503
Expected return on plan assets	(10,298)	(587)	(1,688)	(9,635)	(519)	(1,596)	(9,145)	(497)	(1,542)
Settlement loss	155	—	232	—	—	—	—	—	95
Net amortization:									
Prior service (credit) cost	—	—	(168)	—	—	(192)	—	—	39
Net actuarial loss	2,770	—	959	2,702	—	753	3,278	—	1,031
Net periodic pension (benefit) cost	<u>\$ (94)</u>	<u>\$ 577</u>	<u>\$ 5,935</u>	<u>\$ 375</u>	<u>\$ 511</u>	<u>\$ 5,618</u>	<u>\$ 261</u>	<u>\$ 550</u>	<u>\$ 6,213</u>

The summary of the changes in amounts recognized in other comprehensive income (loss) for the plans for the years ended December 31, 2017, 2016 and 2015 is as follows (in thousands):

	2017			2016			2015		
	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans
Prior service credit (cost)	\$ —	\$ —	\$ (636)	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 645
Net gain (loss) arising during the year	8,879	13	1,609	(3,352)	(594)	(3,361)	(6,365)	1,126	3,025
Amortization:									
Prior service (credit) cost	—	—	(168)	—	—	(192)	—	—	39
Net loss	2,925	—	1,191	2,702	—	753	3,278	—	1,126
Other Plans	—	—	—	—	—	(360)	—	—	—
Currency impact	—	—	(2,033)	—	—	884	—	—	1,760
Total recognized in other comprehensive income (loss)	<u>\$11,804</u>	<u>\$ 13</u>	<u>\$ (37)</u>	<u>\$ (650)</u>	<u>\$ (594)</u>	<u>\$ (2,276)</u>	<u>\$ (3,087)</u>	<u>\$ 1,126</u>	<u>\$ 6,595</u>

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The summary of the amounts included in accumulated other comprehensive loss in stockholders' equity for the plans at December 31, 2017 and 2016 is as follows (in thousands):

	2017			2016		
	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans
Net actuarial (loss) gain	\$(37,682)	\$ 588	\$(18,857)	\$(49,486)	\$ 575	\$(19,638)
Prior service credit	—	—	530	—	—	1,348
Total	\$(37,682)	\$ 588	\$(18,327)	\$(49,486)	\$ 575	\$(18,290)

The summary of the amounts included in accumulated other comprehensive loss expected to be included in next year's net periodic benefit cost for the plans at December 31, 2017 is as follows (in thousands):

	2017		
	U.S. Pension Plans	U.S. Retiree Healthcare Plan	Non-U.S. Pension Plans
Net actuarial loss	\$(3,075)	\$ —	\$ (685)
Prior service credit	—	—	119
Total	\$(3,075)	\$ —	\$ (566)

The plans' investment asset mix is as follows at December 31, 2017 and 2016:

	2017			2016		
	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans	U.S. Pension Plans	U.S. Healthcare Plan	Non-U.S. Pension Plans
Equity securities	77%	65%	7%	74%	58%	7%
Debt securities	23%	35%	16%	25%	42%	18%
Cash and cash equivalents	0%	0%	8%	1%	0%	6%
Insurance contracts and other	0%	0%	69%	0%	0%	69%
Total	100%	100%	100%	100%	100%	100%

The plans' investment policies include the following asset allocation guidelines:

	U.S. Pension and U.S. Retiree Healthcare Plans		Non-U.S. Pension Plans
	Policy Target	Range	
Equity securities	70%	50% - 90%	5%
Debt securities	25%	20% - 60%	20%
Cash and cash equivalents	5%	0% - 20%	10%
Insurance contracts and other	0%	0% - 20%	65%

The asset allocation policy for the U.S. Pension Plans and U.S. Retiree Healthcare Plan was developed in consideration of the following long-term investment objectives: achieving a return on assets consistent with the investment policy, achieving portfolio returns which exceed the average return for similarly invested funds and maximizing portfolio returns with at least a return of 2.5% above the one-year constant maturity Treasury bond yield over reasonable measurement periods and based on reasonable market cycles.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Within the equity portfolio of the U.S. retirement plans, investments are diversified among market capitalization and investment strategy. The Company targets a 30% allocation of its U.S. retirement plans' equity portfolio to be invested in financial markets outside of the United States. The Company does not invest in its own stock within the U.S. retirement plans' assets.

Plan assets are measured at fair value using the following valuation techniques and inputs:

- Level 1: The fair value of these types of investments is based on market and observable sources from daily quoted prices on nationally recognized securities exchanges.
- Level 2: The fair value of the money market funds held with financial institutions is based on the net asset value of the underlying treasury bill and commercial paper, which are valued using third-party pricing services that utilize inputs such as benchmark yields, credit spreads and broker/dealer quotes to determine the value.
- Level 3: These bank and insurance investment contracts are issued by well-known, highly-rated companies. The fair value disclosed represents the present value of future cash flows under the terms of the respective contracts. Significant assumptions used to determine the fair value of these contracts include the amount and timing of future cash flows and counterparty credit risk.

There have been no changes in the above valuation techniques associated with determining the value of the plans' assets during the years ended December 31, 2017 and 2016.

Investments valued at NAV consist of hedge funds in the U.S Pension Plans, which are valued based on underlying investments in equity securities of U.S. companies where the hedge fund manager is targeting a particular net long or net short position on the underlying stock. The fair value of these funds is initially based on market and observable sources from daily quoted prices on nationally recognized securities exchanges and then adjustments are made to the net asset value of the hedge fund to account for the effects of any liquidation or redemption restrictions. The redemption terms for the hedge funds are generally quarterly with a 90 day notification period and there are no redemption restrictions.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The fair value of the Company's retirement plan assets are as follows at December 31, 2017 (in thousands):

	Total at December 31, 2017	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
U.S. Pension Plans:				
Mutual funds ^(a)	\$ 163,438	\$ 163,438	\$ —	\$ —
Total U.S. Pension Plans	163,438	163,438	—	—
U.S. Retiree Healthcare Plan:				
Mutual funds ^(b)	11,125	11,125	—	—
Total U.S. Retiree Healthcare Plan	11,125	11,125	—	—
Non-U.S. Pension Plans:				
Cash equivalents ^(c)	5,783	5,783	—	—
Mutual funds ^(d)	17,244	17,244	—	—
Bank and insurance investment contracts ^(e)	51,963	—	—	51,963
Total Non-U.S. Pension Plans	74,990	23,027	—	51,963
Total fair value of retirement plan assets	249,553	\$ 197,590	\$ —	\$ 51,963
Investments valued at NAV	7,935			
Total retirement plan assets	\$ 257,488			

The fair value of the Company's retirement plan assets are as follows at December 31, 2016 (in thousands):

	Total at December 31, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
U.S. Pension Plans:				
Mutual funds ^(f)	\$ 136,548	\$ 136,548	\$ —	\$ —
Cash equivalents ^(g)	728	—	728	—
Total U.S. Pension Plans	137,276	136,548	728	—
U.S. Retiree Healthcare Plan:				
Mutual funds ^(h)	9,142	9,142	—	—
Total U.S. Retiree Healthcare Plan	9,142	9,142	—	—
Non-U.S. Pension Plans:				
Cash equivalents ^(c)	3,718	3,718	—	—
Mutual funds ⁽ⁱ⁾	16,737	16,737	—	—
Bank and insurance investment contracts ^(e)	45,093	—	—	45,093
Total Non-U.S. Pension Plans	65,548	20,455	—	45,093
Total fair value of retirement plan assets	211,966	\$ 166,145	\$ 728	\$ 45,093
Investments valued at NAV	7,389			
Total retirement plan assets	\$ 219,355			

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

- (a) The mutual fund balance in the U.S. Pension Plans are invested in the following categories: 45% in the common stock of large-cap U.S. companies, 30% in the common stock of international growth companies and 25% in fixed income bonds issued by U.S. companies and by the U.S. government and its agencies.
- (b) The mutual fund balance in the U.S. Retiree Healthcare Plan is invested in the following categories: 41% in the common stock of large-cap U.S. companies, 24% in the common stock of international growth companies and 35% in fixed income bonds of U.S. companies and U.S. government.
- (c) Primarily represents deposit account funds held with various financial institutions.
- (d) The mutual fund balance in the Non-U.S. Pension Plans is primarily invested in the following categories: 58% in international bonds, 32% in the common stock of international companies, 1% in mortgages and real estate and 9% in various other global investments.
- (e) Amount represents bank and insurance guaranteed investment contracts.
- (f) The mutual fund balance in the U.S. Pension Plans are invested in the following categories: 35% in the common stock of large-cap U.S. companies, 38% in the common stock of international growth companies and 27% in fixed income bonds issued by U.S. companies and by the U.S. government and its agencies.
- (g) Primarily represents money market funds held with various financial institutions.
- (h) The mutual fund balance in the U.S. Retiree Healthcare Plan is invested in the following categories: 38% in the common stock of large-cap U.S. companies, 19% in the common stock of international growth companies and 43% in fixed income bonds of U.S. companies and U.S. government.
- (i) The mutual fund balance in the Non-U.S. Pension Plans is invested in the following categories: 56% in international bonds and 30% in the common stock of international companies, 8% in mortgages and real estate and 6% in various other global investments.

The following table summarizes the changes in fair value of the Level 3 retirement plan assets for the years ended December 31, 2017 and 2016 (in thousands):

	Insurance Guaranteed Investment Contracts
Fair value of assets, December 31, 2015	\$ 38,943
Net purchases (sales) and appreciation (depreciation)	6,150
Fair value of assets, December 31, 2016	45,093
Net purchases (sales) and appreciation (depreciation)	6,870
Fair value of assets, December 31, 2017	\$ 51,963

The weighted-average assumptions used to determine the benefit obligation in the consolidated balance sheets at December 31, 2017, 2016 and 2015 are as follows:

	2017		2016		2015	
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.
Discount rate	3.94%	1.79%	4.41%	1.71%	4.59%	2.23%
Increases in compensation levels	**	2.43%	**	2.47%	**	2.45%

** Not applicable

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The weighted-average assumptions used to determine the net periodic pension cost at December 31, 2017, 2016 and 2015 are as follows:

	2017		2016		2015	
	U.S.	Non-U.S.	U.S.	Non-U.S.	U.S.	Non-U.S.
Discount rate	4.28%	1.80%	4.42%	2.20%	3.71%	1.98%
Return on plan assets	6.53%	2.64%	6.47%	2.74%	6.35%	2.58%
Increases in compensation levels	**	2.63%	**	2.50%	**	2.57%

** Not applicable

To develop the expected long-term rate of return on assets assumption, the Company considered historical returns and future expectations for returns for each asset class, as well as the target asset allocation of the pension portfolio and historical expenses paid by the plan. A one-quarter percentage point increase in the assumed long-term rate of return on assets would decrease the Company's net periodic benefit cost for the Waters Retirement Plan by less than \$1 million. A one-quarter percentage point increase in the discount rate would decrease the Company's net periodic benefit cost for the Waters Retirement Plan by less than \$1 million.

During fiscal year 2018, the Company expects to contribute a total of approximately \$4 million to \$10 million to the Company's defined benefit plans. Estimated future benefit payments from the plans as of December 31, 2017 are as follows (in thousands):

	U.S. Pension and Retiree Healthcare Plans	Non-U.S. Pension Plans	Total
2018	\$ 9,385	\$ 2,396	\$11,781
2019	10,114	1,563	11,677
2020	10,287	2,060	12,347
2021	10,777	2,089	12,866
2022	10,749	2,963	13,712
2023 - 2027	58,789	18,217	77,006

16 Business Segment Information

The accounting standards for segment reporting establish standards for reporting information about operating segments in annual financial statements and require selected information for those segments to be presented in interim financial reports of public business enterprises. They also establish standards for related disclosures about products and services, geographic areas and major customers. The Company's business activities, for which discrete financial information is available, are regularly reviewed and evaluated by the chief operating decision maker. As a result of this evaluation, the Company determined that it has two operating segments: Waters® and TA®.

The Waters operating segment is primarily in the business of designing, manufacturing, distributing and servicing LC and MS instruments, columns and other precision chemistry consumables that can be integrated and used along with other analytical instruments. The TA operating segment is primarily in the business of designing, manufacturing, distributing and servicing thermal analysis, rheometry and calorimetry instruments. The Company's two operating segments have similar economic characteristics; product processes; products and services; types and classes of customers; methods of distribution; and regulatory environments. Because of these similarities, the two segments have been aggregated into one reporting segment for financial statement purposes. Please refer to the consolidated financial statements for financial information regarding the one reportable segment of the Company.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

Net sales for the Company's products and services are as follows for the years ended December 31, 2017, 2016 and 2015 (in thousands):

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Product net sales:			
Waters instrument systems	\$ 988,750	\$ 943,218	\$ 895,626
Chemistry consumables	372,157	345,413	317,941
TA instrument systems	191,442	171,665	171,689
Total product sales	<u>1,552,349</u>	<u>1,460,296</u>	<u>1,385,256</u>
Service net sales:			
Waters service	686,656	639,432	593,301
TA service	70,073	67,695	63,775
Total service sales	<u>756,729</u>	<u>707,127</u>	<u>657,076</u>
Total net sales	<u>\$2,309,078</u>	<u>\$2,167,423</u>	<u>\$2,042,332</u>

Geographic sales information is presented below for the years ended December 31, 2017, 2016 and 2015 (in thousands):

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Net Sales:			
United States	\$ 669,274	\$ 665,280	\$ 656,361
Europe	636,472	577,257	555,886
Asia:			
China	387,059	331,354	278,600
Japan	167,258	167,977	145,184
Asia Other	308,300	283,653	272,179
Total Asia	<u>862,617</u>	<u>782,984</u>	<u>695,963</u>
Other	140,715	141,902	134,122
Total net sales	<u>\$2,309,078</u>	<u>\$2,167,423</u>	<u>\$2,042,332</u>

The Other category includes Canada, Latin America and Puerto Rico. Net sales are attributable to geographic areas based on the region of destination. None of the Company's individual customers accounts for more than 2% of annual Company sales.

Long-lived assets information at December 31, 2017 and 2016 is presented below (in thousands):

	<u>2017</u>	<u>2016</u>	<u>2015</u>
Long-lived assets:			
United States	\$ 186,344	\$ 207,062	\$ 192,352
Europe	136,440	114,848	128,189
Asia	24,774	14,376	11,868
Other	1,720	832	946
Total long-lived assets	<u>\$ 349,278</u>	<u>\$ 337,118</u>	<u>\$ 333,355</u>

The Other category includes Canada, Latin America and Puerto Rico. Long-lived assets exclude goodwill, other intangible assets and other assets.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

17 Unaudited Quarterly Results

The Company's unaudited quarterly results are summarized below (in thousands, except per share data):

2017	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Net sales	\$497,969	\$558,250	\$565,584	\$ 687,275	\$2,309,078
Costs and operating expenses:					
Cost of sales	211,095	229,627	235,892	270,453	947,067
Selling and administrative expenses	130,524	130,190	135,194	148,795	544,703
Research and development expenses	30,752	32,937	33,782	35,122	132,593
Litigation provisions	—	10,018	—	1,096	11,114
Purchased intangibles amortization	1,729	1,693	1,682	1,639	6,743
Acquired in-process research and development	5,000	—	—	—	5,000
Total costs and operating expenses	<u>379,100</u>	<u>404,465</u>	<u>406,550</u>	<u>457,105</u>	<u>1,647,220</u>
Operating income	118,869	153,785	159,034	230,170	661,858
Interest expense	(12,725)	(14,083)	(14,750)	(15,281)	(56,839)
Interest income	7,343	8,370	9,516	10,849	36,078
Income before income taxes	113,487	148,072	153,800	225,738	641,097
Provision for income taxes	7,930	16,250	17,696	578,910	620,786
Net income (loss)	<u>\$105,557</u>	<u>\$131,822</u>	<u>\$136,104</u>	<u>\$(353,172)</u>	<u>\$ 20,311</u>
Net income (loss) per basic common share	1.32	1.65	1.71	(4.44)	0.25
Weighted-average number of basic common shares	80,073	79,979	79,712	79,454	79,793
Net income (loss) per diluted common share	1.31	1.63	1.69	(4.44)	0.25
Weighted-average number of diluted common shares and equivalents	80,769	80,756	80,521	79,454	80,604
2016	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Total
Net sales	\$475,246	\$536,560	\$526,830	\$628,787	\$2,167,423
Costs and operating expenses:					
Cost of sales	201,151	220,379	218,344	251,579	891,453
Selling and administrative expenses	129,351	129,581	123,861	130,238	513,031
Research and development expenses	29,438	32,578	30,418	32,753	125,187
Litigation provisions	—	—	—	3,524	3,524
Purchased intangibles amortization	2,644	2,411	2,476	2,358	9,889
Total costs and operating expenses	<u>362,584</u>	<u>384,949</u>	<u>375,099</u>	<u>420,452</u>	<u>1,543,084</u>
Operating income	112,662	151,611	151,731	208,335	624,339
Interest expense	(10,119)	(10,983)	(11,707)	(12,102)	(44,911)
Interest income	4,087	4,827	5,426	6,346	20,686
Income before income taxes	106,630	145,455	145,450	202,579	600,114
Provision for income taxes	12,578	17,238	20,594	28,201	78,611
Net income	<u>\$ 94,052</u>	<u>\$128,217</u>	<u>\$124,856</u>	<u>\$174,378</u>	<u>\$ 521,503</u>
Net income per basic common share	1.16	1.59	1.55	2.17	6.46
Weighted-average number of basic common shares	81,275	80,804	80,677	80,366	80,786
Net income per diluted common share	1.15	1.57	1.53	2.15	6.41
Weighted-average number of diluted common shares and equivalents	81,974	81,455	81,388	80,954	81,417

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS — (Continued)

The Company typically experiences an increase in sales in the fourth quarter, as a result of purchasing habits for capital goods of customers that tend to exhaust their spending budgets by calendar year end. Selling and administrative expenses are typically higher after the first quarter in each year as the Company's annual payroll merit increases take effect. Selling and administrative expenses will vary in the fourth quarter in relation to performance in the quarter and for the year. In the third quarter of 2017 and first quarter of 2016, the Company recorded \$4 million and \$7 million of stock compensation expenses, respectively, in selling and administrative expenses related to the modification of certain stock awards upon the retirement of senior executives.

In the first quarter of 2017, the Company recorded a \$5 million charge related to acquired in-process research and development (see Note 2). In 2017 and in fourth quarter of 2016, the company recorded litigation provisions of \$11 million and \$4 million, respectively (see Note 10). In the fourth quarter of 2017, the Company recorded a \$550 million income tax provision as a result of the 2017 Tax Act (see Note 9).

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Item 9: *Changes in and Disagreements with Accountants on Accounting and Financial Disclosure*

None.

Item 9A: *Controls and Procedures*

Evaluation of Disclosure Controls and Procedures

The Company's chief executive officer and chief financial officer (principal executive and principal financial officer), with the participation of management, evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of the end of the period covered by this annual report on Form 10-K. Based on this evaluation, the Company's chief executive officer and chief financial officer concluded that the Company's disclosure controls and procedures were effective as of December 31, 2017 (1) to ensure that information required to be disclosed by the Company, including its consolidated subsidiaries, in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its chief executive officer and chief financial officer, to allow timely decisions regarding the required disclosure and (2) to provide reasonable assurance that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms.

Management's Annual Report on Internal Control Over Financial Reporting

See Management's Report on Internal Control Over Financial Reporting in Item 8 on page 47 of this Form 10-K.

Report of the Independent Registered Public Accounting Firm

See the report of PricewaterhouseCoopers LLP in Item 8 on page 48 of this Form 10-K.

Changes in Internal Controls Over Financial Reporting

No change was identified in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the quarter ended December 31, 2017 that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting.

Item 9B: *Other Information*

None.

PART III

Item 10: Directors, Executive Officers and Corporate Governance

Information regarding the Company's directors and any material changes to the process by which security holders may recommend nominees to the Board of Directors is contained in the definitive proxy statement for the 2018 Annual Meeting of Stockholders under the headings "Election of Directors", "Directors Meetings and Board Committees", "Corporate Governance", "Report of the Audit Committee of the Board of Directors" and "Compensation of Directors and Executive Officers". Information regarding compliance with Section 16(a) of the Exchange Act is contained in the Company's definitive proxy statement for the 2018 Annual Meeting of Stockholders under the heading "Section 16(a) Beneficial Ownership Reporting Compliance". Information regarding the Company's Audit Committee and Audit Committee Financial Expert is contained in the definitive proxy statement for the 2018 Annual Meeting of Stockholders under the headings "Report of the Audit Committee of the Board of Directors" and "Directors Meetings and Board Committees". Such information is incorporated herein by reference. Information regarding the Company's executive officers is contained in Part I of this Form 10-K.

The Company has adopted a Code of Business Conduct and Ethics (the "Code") that applies to all of the Company's employees (including its executive officers) and directors and that is in compliance with Item 406 of Regulation S-K. The Code has been distributed to all employees of the Company. In addition, the Code is available on the Company's website, www.waters.com, under the caption "Corporate Governance". The Company intends to satisfy the disclosure requirement regarding any amendment to, or waiver of a provision of, the Code applicable to any executive officer or director by posting such information on its website. The Company shall also provide to any person without charge, upon request, a copy of the Code. Any such request must be made in writing to the Secretary of the Company, c/o Waters Corporation, 34 Maple Street, Milford, MA 01757.

The Company's corporate governance guidelines and the charters of the audit committee, compensation committee, and nominating and corporate governance committee of the Board of Directors are available on the Company's website, www.waters.com, under the caption "Corporate Governance". The Company shall provide to any person without charge, upon request, a copy of any of the foregoing materials. Any such request must be made in writing to the Secretary of the Company, c/o Waters Corporation, 34 Maple Street, Milford, MA 01757.

In 2017, the Company adopted a proxy access bylaw provision that allows eligible stockholders or groups of up to 20 stockholders who have held at least 3% of the Company's common stock continuously for three years to nominate up to two individuals or 20% of the Board of Directors, whichever is greater, for election at the Company's Annual Meeting of Stockholders, and to have those individuals included in the Company's proxy materials for that meeting. The Company believes that the proxy access bylaw adopted by the Company strikes an appropriate balance between providing meaningful proxy access for stockholders and limiting the potential for abuse.

Item 11: Executive Compensation

This information is contained in the Company's definitive proxy statement for the 2018 Annual Meeting of Stockholders under the headings "Compensation of Directors and Executive Officers", "Compensation Committee Interlocks and Insider Participation" and "Compensation Committee Report". Such information is incorporated herein by reference.

Item 12: Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

Except for the Equity Compensation Plan information set forth below, this information is contained in the Company's definitive proxy statement for the 2018 Annual Meeting of Stockholders under the heading "Security Ownership of Certain Beneficial Owners and Management". Such information is incorporated herein by reference.

[Table of Contents](#)**Equity Compensation Plan Information**

The following table provides information as of December 31, 2017 about the Company's common stock that may be issued upon the exercise of options, warrants, and rights under its existing equity compensation plans (in thousands):

	A	B	C
	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (1)	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights (1)	Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in column (A))
Equity compensation plans approved by security holders	2,521	\$ 124.41	3,346
Equity compensation plans not approved by security holders	—	—	—
Total	2,521	\$ 124.41	3,346

- (1) Column (a) includes an aggregate of 482 thousand ordinary shares to be issued upon settlement of restricted stock, restricted stock units and performance stock units. The weighted-average share price in column (b) does not take into account restricted stock, restricted stock units or performance stock units, which do not have an exercise price.

See Note 12, Stock-Based Compensation, in the Notes to Consolidated Financial Statements for a description of the material features of the Company's equity compensation plans.

Item 13: Certain Relationships and Related Transactions and Director Independence

This information is contained in the Company's definitive proxy statement for the 2018 Annual Meeting of Stockholders under the headings "Directors Meetings and Board Committees", "Corporate Governance" and "Compensation of Directors and Executive Officers". Such information is incorporated herein by reference.

Item 14: Principal Accountant Fees and Services

This information is contained in the Company's definitive proxy statement for the 2018 Annual Meeting of Stockholders under the headings "Ratification of Selection of Independent Registered Public Accounting Firm" and "Report of the Audit Committee of the Board of Directors". Such information is incorporated herein by reference.

PART IV

Item 15: Exhibits, Financial Statement Schedules

(a) Documents filed as part of this report:

(1) Financial Statements:

The consolidated financial statements of the Company and its subsidiaries are filed as part of this Form 10-K and are set forth on pages 50 to 93. The report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, dated February 27, 2018, is set forth on page 48 of this Form 10-K.

(2) Financial Statement Schedule:

See (c) below.

(3) Exhibits:

<u>Exhibit Number</u>	<u>Description of Document</u>
3.1	Second Amended and Restated Certificate of Incorporation of Waters Corporation.(1)(P)
3.2	Certificate of Amendment of Second Amended and Restated Certificate of Incorporation of Waters Corporation, dated as of May 12, 1999.(3)
3.3	Certificate of Amendment of Second Amended and Restated Certificate of Incorporation of Waters Corporation, dated as of July 27, 2000.(4)
3.4	Certificate of Amendment of Second Amended and Restated Certificate of Incorporation of Waters Corporation, dated as of May 25, 2001.(5)
3.5	Amended and Restated Bylaws of Waters Corporation, dated as of December 5, 2017.(29)
10.1	Waters Corporation Retirement Plan.(2)(P)(*)
10.2	Waters Corporation 2003 Equity Incentive Plan.(6)(*)
10.3	First Amendment to the Waters Corporation 2003 Equity Incentive Plan.(7)(*)
10.4	Form of Director Stock Option Agreement under the Waters Corporation 2003 Equity Incentive Plan, as amended.(8)(*)
10.5	Form of Director Restricted Stock Agreement under the Waters Corporation 2003 Equity Incentive Plan, as amended.(8)(*)
10.6	Form of Executive Officer Stock Option Agreement under the Waters Corporation 2003 Equity Incentive Plan, as amended.(8)(*)
10.7	Second Amendment to the Waters Corporation 2003 Equity Incentive Plan.(9)(*)
10.8	Third Amendment to the Waters Corporation 2003 Equity Incentive Plan.(10)(*)
10.9	Amended and Restated Waters 401(k) Restoration Plan, effective January 1, 2008.(11)(*)
10.10	Change of Control/Severance Agreement, dated as of February 27, 2008, between Waters Corporation and Mark T. Beaudouin.(12)(*)
10.11	Change of Control/Severance Agreement, dated as of February 27, 2008, between Waters Corporation and Elizabeth B. Rae.(12)(*)
10.12	Change of Control/Severance Agreement, dated as of February 27, 2008, between Waters Corporation and Eugene G. Cassis.(23)(*)

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<u>Exhibit Number</u>	<u>Description of Document</u>
10.13	<u>Amended and Restated Waters Retirement Restoration Plan, effective January 1, 2008.(13)(*)</u>
10.14	<u>Amended and Restated Waters Corporation 1996 Non-Employee Director Deferred Compensation Plan, Effective January 1, 2008.(13)(*)</u>
10.15	<u>2014 Waters Corporation Management Incentive Plan.(21)(*)</u>
10.16	<u>Waters Corporation 2009 Employee Stock Purchase Plan.(14)(*)</u>
10.17	<u>Note Purchase Agreement, dated as of February 1, 2010, between Waters Corporation and the purchases named therein.(15)</u>
10.18	<u>First Amendment to the Note Purchase Agreement, dated as of February 1, 2010.(16)</u>
10.19	<u>Note Purchase Agreement, dated March 15, 2011, between Waters Corporation and the purchases named therein.(16)</u>
10.20	<u>Waters Corporation 2012 Equity Incentive Plan.(17)(*)</u>
10.21	<u>Form of Waters 2012 Stock Option Agreement - Executive Officers.(18)(*)</u>
10.22	<u>Form of Waters 2012 Stock Option Agreement - Directors.(18)(*)</u>
10.23	<u>Form of Waters 2012 Restricted Stock Agreement - Directors.(18)(*)</u>
10.24	<u>Form of Waters 2012 Restricted Stock Unit Agreement for Executive Officers - Five Year Vesting.(19)(*)</u>
10.25	<u>Form of Waters 2012 Restricted Stock Unit Agreement for Executive Officers - One Year Vesting.(19)(*)</u>
10.26	<u>Note Purchase Agreement, dated June 30, 2014, between Waters Corporation and the purchases named therein.(20)</u>
10.27	<u>Change of Control/Severance Agreement, dated as of April 1, 2015, between Waters Corporation and Michael F. Silveira.(22)(*)</u>
10.28	<u>President and Chief Executive Employment Agreement.(23)(*)</u>
10.29	<u>Change of Control/Severance Agreement, dated as of September 8, 2015, between Waters Corporation and Christopher J. O'Connell.(23)(*)</u>
10.30	<u>Note Purchase Agreement, dated as of May 12, 2016, between Waters Corporation and the purchasers named therein.(24)</u>
10.31	<u>Form of Waters 2012 Performance Stock Unit Award Agreement.(25)(*)</u>
10.32	<u>Senior Vice President and Chief Financial Officer Employment Agreement.(26)(*)</u>
10.33	<u>Change of Control/Severance Agreement, dated as of January 9, 2017, between Waters Corporation and Sherry L. Buck.(26)(*)</u>
10.34	<u>Form of Change of Control/Severance Agreement.(27)(*)</u>
10.35	<u>Employment Agreement, dated July 21, 2017, between Waters Corporation and Dr. Rohit Khanna.(28)(*)</u>
10.36	<u>Credit Agreement, dated as of November 30, 2017, among Waters Corporation, JPMorgan Chase Bank, N.A., JP Morgan Europe Limited and other Lenders party thereto.</u>
21.1	<u>Subsidiaries of Waters Corporation.</u>
23.1	<u>Consent of PricewaterhouseCoopers LLP, an independent registered public accounting firm.</u>

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<u>Exhibit Number</u>	<u>Description of Document</u>
31.1	Chief Executive Officer Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Chief Financial Officer Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Chief Executive Officer Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.(**)
32.2	Chief Financial Officer Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.(**)
101	The following materials from Waters Corporation’s Annual Report on Form 10-K for the year ended December 31, 2017, formatted in XBRL (Extensible Business Reporting Language): (i) the Consolidated Balance Sheets, (ii) the Consolidated Statements of Operations, (iii) the Consolidated Statements of Comprehensive Income (iv) the Consolidated Statements of Cash Flows, (v) the Consolidated Statements of Stockholders’ Equity and (vi) Notes to Consolidated Financial Statements.
(1)	Incorporated by reference to the Registrant’s Report on Form 10-K dated March 29, 1996 (File No. 001-14010).
(2)	Incorporated by reference to the Registrant’s Registration Statement on Form S-1 (File No. 333-96934).
(3)	Incorporated by reference to the Registrant’s Report on Form 10-Q dated August 11, 1999 (File No. 001-14010).
(4)	Incorporated by reference to the Registrant’s Report on Form 10-Q dated August 8, 2000 (File No. 001-14010).
(5)	Incorporated by reference to the Registrant’s Report on Form 10-K dated March 28, 2002 (File No. 001-14010).
(6)	Incorporated by reference to the Registrant’s Report on Form S-8 dated November 20, 2003 (File No. 333-110613).
(7)	Incorporated by reference to the Registrant’s Report on Form 10-K dated March 12, 2004 (File No. 001-14010).
(8)	Incorporated by reference to the Registrant’s Report on Form 10-Q dated November 10, 2004 (File No. 001-14010).
(9)	Incorporated by reference to the Registrant’s Report on Form 10-Q dated August 5, 2005 (File No. 001-14010).
(10)	Incorporated by reference to the Registrant’s Report on Form 10-K dated March 1, 2007 (File No. 001-14010).
(11)	Incorporated by reference to the Registrant’s Report on Form 10-Q dated November 2, 2007 (File No. 001-14010).
(12)	Incorporated by reference to the Registrant’s Report on Form 10-K dated February 29, 2008 (File No. 001-14010).
(13)	Incorporated by reference to the Registrant’s Report on Form 10-K dated February 27, 2009 (File No. 001-14010).
(14)	Incorporated by reference to the Registrant’s Report on Form S-8 dated July 10, 2009 (File No. 333-160507).
(15)	Incorporated by reference to the Registrant’s Report on Form 10-K dated February 26, 2010 (File No. 001-14010).

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- (16) Incorporated by reference to the Registrant's Report on Form 10-Q dated May 6, 2011 (File No. 001-14010).
- (17) Incorporated by reference to the Registrant's Report on Form S-8 dated September 5, 2012 (File No. 333-183721).
- (18) Incorporated by reference to the Registrant's Report on Form 8-K dated December 11, 2012 (File No. 001-14010).
- (19) Incorporated by reference to the Registrant's Report on Form 8-K dated December 11, 2013 (File No. 001-14010).
- (20) Incorporated by reference to the Registrant's Report on Form 10-Q dated August 1, 2014 (File No. 001-14010).
- (21) Incorporated by reference to the Registrant's Report on Form 10-K dated February 27, 2015 (File No. 001-14010).
- (22) Incorporated by reference to the Registrant's Report on Form 10-Q dated May 8, 2015 (File No. 001-14010).
- (23) Incorporated by reference to the Registrant's Report on Form 10-Q dated August 7, 2015 (File No. 001-14010).
- (24) Incorporated by reference to the Registrant's Report on Form 10-Q dated August 5, 2016 (File No. 001-14010).
- (25) Incorporated by reference to the Registrant's Report on Form 8-K dated December 15, 2016 (File No. 001-14010).
- (26) Incorporated by reference to the Registrant's Report on Form 10-K dated February 24, 2017 (File No. 001-14010).
- (27) Incorporated by reference to the Registrant's Report on Form 8-K dated March 27, 2017 (File No. 001-14010).
- (28) Incorporated by reference to the Registrant's Report on Form 10-Q dated November 3, 2017 (File No. 001-14010).
- (29) Incorporated by reference to the Registrant's Report on Form 8-K dated December 8, 2017 (File No. 001-14010).
- (P) Paper Filing
- (*) Management contract or compensatory plan required to be filed as an Exhibit to this Form 10-K.
- (**) This exhibit shall not be deemed "filed" for purposes of Section 18 of the Exchange Act, or otherwise subject to the liability of that section, nor shall it be deemed incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any filing, except to the extent the Company specifically incorporates it by reference.
- (b) See Item 15 (a) (3) above.
- (c) Financial Statement Schedule:

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The following additional financial statement schedule should be considered in conjunction with the consolidated financial statements. All other schedules have been omitted because the required information is either not applicable or not sufficiently material to require submission of the schedule.

WATERS CORPORATION AND SUBSIDIARIES
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
For each of the three years in the period ended December 31, 2017

	Balance at Beginning of Period	Charged to Provision for Income Taxes*	Other**	Balance at End of Period
Valuation allowance for deferred tax assets:				
2017	\$61,225	\$ (6,363)	\$ 7,236	\$62,098
2016	\$68,595	\$ (5,473)	\$ (1,897)	\$61,225
2015	\$82,550	\$ 1,363	\$(15,318)	\$68,595

* These amounts have been recorded as part of the income statement provision for income taxes. The income statement effects of these amounts have largely been offset by amounts related to changes in other deferred tax balance sheet accounts.

** The change in the valuation allowance during the year ended December 31, 2017 is primarily due to the effect of foreign currency translation on a valuation allowance related to a net operating loss carryforward. The change in the valuation allowance during the year ended December 31, 2016 is primarily due to the effect of foreign currency translation on a valuation allowance related to a net operating loss carryforward and the release of a valuation allowance related to a foreign tax credit carryforward due to expiration.

Item 16: Form 10-K Summary

The optional summary in Item 16 has not been included in this Form 10-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

WATERS CORPORATION

/s/ SHERRY L. BUCK

Sherry L. Buck
*Senior Vice President and
Chief Financial Officer*

Date: February 27, 2018

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities indicated on February 27, 2018.

<u>/S/ CHRISTOPHER J. O'CONNELL</u> Christopher J. O'Connell	Chairman of the Board of Directors, President and Chief Executive Officer (principal executive officer)
<u>/S/ SHERRY L. BUCK</u> Sherry L. Buck	Senior Vice President and Chief Financial Officer (principal financial officer) (principal accounting officer)
<u>/S/ DR. MICHAEL J. BERENDT</u> Dr. Michael J. Berendt	Director
<u>/S/ EDWARD CONARD</u> Edward Conard	Director
<u>/S/ DR. LAURIE H. GLIMCHER</u> Dr. Laurie H. Glimcher	Director
<u>/S/ CHRISTOPHER A. KUEBLER</u> Christopher A. Kuebler	Director
<u>/S/ FLEMMING ORNSKOV</u> Flemming Ornskov	Director
<u>/S/ JOANN A. REED</u> JoAnn A. Reed	Director
<u>/S/ THOMAS P. SALICE</u> Thomas P. Salice	Director

CREDIT AGREEMENT

dated as of

November 30, 2017

among

WATERS CORPORATION,

the Lenders party hereto,

and

JPMORGAN CHASE BANK, N.A.,
as Administrative Agent

JPMORGAN CHASE BANK, N.A.,
MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED,
HSBC SECURITIES (USA) INC.,
CITIZENS BANK, N.A.,
THE BANK OF TOKYO-MITSUBISHI UFJ, LTD.,
DNB MARKETS, INC.
TD Bank, N.A.,
and
U.S. BANK NATIONAL ASSOCIATION,
as Joint Lead Arrangers

JPMORGAN CHASE BANK, N.A.,
MERRILL LYNCH, PIERCE, FENNER & SMITH INCORPORATED,
HSBC SECURITIES (USA) INC.,
and
CITIZENS BANK, N.A.,
as Joint Bookrunners

JPMORGAN CHASE BANK, N.A.,
BANK OF AMERICA, N.A.,
HSBC BANK USA, NATIONAL ASSOCIATION,
and
CITIZENS BANK, N.A.,
as Syndication Agents

THE BANK OF TOKYO-MITSUBISHI UFJ, LTD.,
DNB BANK ASA, NEW YORK BRANCH
TD Bank, N.A.,
and
U.S. BANK NATIONAL ASSOCIATION,
as Documentation Agents

and

BARCLAYS BANK PLC,
KEYBANK NATIONAL ASSOCIATION,
SUNTRUST BANK,
THE HUNTINGTON NATIONAL BANK,
BRANCH BANKING AND TRUST COMPANY,

and

PNC BANK, NATIONAL ASSOCIATION,
as Senior Managing Agents

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SCHEDULES:

- Schedule 1.01 — Subsidiary Guarantors
- Schedule 2.01 — Lenders and Commitments
- Schedule 2.04 — Existing Letters of Credit
- Schedule 2.17 — Payment Instructions

EXHIBITS:

- Exhibit A — Form of Assignment and Assumption
- Exhibit B — Form of Subsidiary Guarantee Agreement
- Exhibit C-1 — Form of Opinion of Counsel for the Company
- Exhibit C-2 — Form of Opinion of General Counsel of the Company
- Exhibit D — Form of Promissory Note
- Exhibit E — Form of U.S. Tax Certificate

CREDIT AGREEMENT dated as of November 30, 2017, among WATERS CORPORATION, a Delaware corporation (the “Company”), the LENDERS party hereto, and JPMORGAN CHASE BANK, N.A., as Administrative Agent.

The Company has requested the Lenders (such term and each other capitalized term used and not otherwise defined herein having the meaning assigned to it in Section 1.01) to extend credit in the form of (a) Term Loans to the Company in US Dollars in an aggregate principal amount of \$300,000,000 and (b) Revolving Commitments under which the Company may obtain Loans in US Dollars or Euro in an aggregate principal amount at any time outstanding that will not result in aggregate Revolving Exposures exceeding \$1,500,000,000. The proceeds of Borrowings are to be used for general corporate purposes of the Company and its subsidiaries, including repayment of amounts outstanding under the Existing Credit Agreement, payment of indebtedness, financing of acquisitions, payment of fees and expenses in connection with the credit facilities established hereby, repurchases of equity securities of the Company and working capital.

The Lenders are willing to establish the credit facilities referred to in the preceding paragraph upon the terms and subject to the conditions set forth herein. Accordingly, the parties hereto agree as follows:

ARTICLE I

Definitions

Section 1.01. Defined Terms. As used in this Agreement, the following terms have the meanings specified below:

“ABR”, when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Alternate Base Rate.

“Accepting Lender” has the meaning set forth in Section 2.20(a).

“Adjusted LIBO Rate” means, with respect to any LIBOR Borrowing for any Interest Period, an interest rate per annum (rounded upwards, if necessary, to the next 1/100 of 1%) equal to (a) the LIBO Rate for such Interest Period multiplied by (b) the Statutory Reserve Rate.

“Administrative Agent” means JPMCB, in its capacity as administrative agent for the Lenders hereunder and under the other Loan Documents and its successors in such capacity as provided in Article VIII. Unless the context requires otherwise, the term “Administrative Agent” shall include any Affiliate of JPMCB through which JPMCB shall perform any of its obligations in such capacity hereunder.

“Administrative Questionnaire” means an Administrative Questionnaire in a form supplied by the Administrative Agent.

“Affected Class” has the meaning set forth in Section 2.20(a).

“Affiliate” means, with respect to a specified Person, another Person that directly, or indirectly through one or more intermediaries, Controls or is Controlled by or is under common Control with the Person specified.

“Aggregate Revolving Exposure” means the sum of the Revolving Exposures of all the Lenders.

“Agreement” means this Credit Agreement, as amended from time to time in accordance with the terms hereof.

“Agreement Currency” has the meaning assigned to such term in Section 9.13(b).

“Alternate Base Rate” means, for any day, a rate per annum equal to the greatest of (a) the Prime Rate in effect on such day, (b) the NYFRB Rate in effect on such day plus 1/2 of 1% per annum and (c) the Adjusted LIBO Rate on such day (or if such day is not a Business Day, the immediately preceding Business Day) for a deposit in dollars with a maturity of one month plus 1% per annum. For purposes of clause (c) above, the Adjusted LIBO Rate on any day shall be based on the rate per annum appearing on the applicable Reuters screen page (currently page LIBOR01) displaying interest rates for dollar deposits in the London interbank market at approximately 11:00 a.m., London time, on such day for deposits in dollars with a maturity of one month; provided that if such rate shall be less than zero, such rate shall be deemed to be zero. If the Alternate Base Rate is being used as an alternate rate of interest pursuant to Section 2.13, then the Alternate Base Rate shall be the greater of clause (a) and (b) above and shall be determined without reference to clause (c) above. Any change in the Alternate Base Rate due to a change in the Prime Rate, the NYFRB Rate or the Adjusted LIBO Rate shall be effective from and including the effective date of such change in the Prime Rate, the NYFRB Rate or the Adjusted LIBO Rate, respectively.

“Anti-Corruption Laws” means the United States Foreign Corrupt Practices Act of 1977 and all other laws, rules, and regulations applicable to the Company or any of its Subsidiaries from time to time concerning or relating to bribery or corruption.

“Applicable Creditor” has the meaning assigned to such term in Section 9.13(b).

“Applicable Percentage” means, at any time, with respect to any Lender, the percentage of the total Revolving Commitments represented by such Lender’s Revolving Commitment at such time. If the Revolving Commitments have terminated or expired, the Applicable Percentages shall be determined based upon the Revolving Commitments most recently in effect, giving effect to any assignments.

“Applicable Rate” means, for any day, with respect to any Loan of any Type or the facility fees payable hereunder, as the case may be, the applicable rate per annum set forth under the appropriate caption in the table below, based upon the Leverage Ratio as of the most recent determination date:

<u>Category</u>	<u>Leverage Ratio</u>	<u>Facility Fee (basis points per annum)</u>	<u>LIBOR and EURIBOR Spread (basis points per annum)</u>	<u>ABR Spread (basis points per annum)</u>
Category 1	< 1.00	7.5	80.0	0.0
Category 2	≥ 1.00 and < 1.75	10.0	90.0	0.0
Category 3	≥ 1.75 and < 2.50	15.0	95.0	0.0
Category 4	≥ 2.50 and < 3.25	20.0	105.0	5.0
Category 5	≥ 3.25	25.0	112.5	12.5

The Leverage Ratio used on any date to determine the Applicable Rate shall be that in effect at the end of the most recent fiscal quarter for which financial statements shall have been delivered pursuant to Section 5.06(a) or (b) (or, prior to the first delivery of such financial statements, at September 30, 2017); provided that if any financial statements required to have been delivered under Section 5.06(a) or (b) shall not at any time have been delivered, the Applicable Rate shall, until such financial statements shall have been delivered, be determined by reference to Category 5 in the table above.

“Arrangers” means JPMCB, Merrill Lynch, Pierce, Fenner & Smith Incorporated, HSBC Securities (USA) Inc., Citizens Bank, N.A., The Bank of Tokyo-Mitsubishi UFJ, Ltd., DNB Bank ASA, New York Branch, TD Bank, N.A. and U.S. Bank National Association, in their capacities as the joint lead arrangers for the credit facility established hereunder.

“Assignment and Assumption” means an assignment and assumption entered into by a Lender and an assignee (with the consent of any party whose consent is required by Section 9.04), and accepted by the Administrative Agent, in the form of Exhibit A or any other form approved by the Administrative Agent.

“Attributable Debt” means, in connection with any Sale and Leaseback Transaction, the present value (discounted in accordance with GAAP at the discount rate implied in the lease) of the obligations of the lessee for rental payments during the term of the lease.

“Bail-In Action” means the exercise of any Write-Down and Conversion Powers by the applicable EEA Resolution Authority in respect of any liability of an EEA Financial Institution.

“Bail-In Legislation” means, with respect to any EEA Member Country implementing Article 55 of Directive 2014/59/EU of the European Parliament and of the Council of the European Union, the implementing law for such EEA Member Country from time to time that is described in the EU Bail-In Legislation Schedule.

“Bankruptcy Event” means, with respect to any Person, that such Person has become the subject of a bankruptcy or insolvency proceeding, or has had a receiver, conservator, trustee, administrator, custodian, assignee for the benefit of creditors or similar Person charged with the reorganization or liquidation of its business appointed for it, or, in the good faith determination of the Administrative Agent, has taken any action in furtherance of, or indicating its consent to, approval of or acquiescence in, any such proceeding or appointment; provided that a Bankruptcy Event shall not result solely by virtue of any ownership interest, or the acquisition of any ownership interest, in such Person by a Governmental Authority so long as such ownership interest does not result in or provide such Person with immunity from the jurisdiction of courts within the United States of America or from the enforcement of judgments or writs of attachment on its assets or permit such Person (or such Governmental Authority) to reject, repudiate, disavow or disaffirm any agreements made by such Person.

“Benefit Plan” means any of (a) an “employee benefit plan” (as defined in ERISA) that is subject to Title I of ERISA, (b) a “plan” as defined in Section 4975 of the Code or (c) any Person whose assets include (for purposes of ERISA Section 3(42) or otherwise for purposes of Title I of ERISA or Section 4975 of the Code) the assets of any such “employee benefit plan” or “plan”.

“Board” means the Board of Governors of the Federal Reserve System of the United States of America.

“Bookrunners” means JPMCB, Merrill Lynch, Pierce, Fenner & Smith Incorporated, HSBC Securities (USA) Inc. and Citizens Bank, N.A. in their capacities as the joint bookrunners for the credit facility established hereunder.

“Borrowing” means Loans of the same Class, Type and currency, made, converted or continued on the same date and, in the case of LIBOR Loans and EURIBOR Loans, as to which a single Interest Period is in effect.

“Borrowing Minimum” means (a) in the case of a Borrowing denominated in US Dollars, \$5,000,000 and (b) in the case of a Borrowing denominated in Euro, €5,000,000.

“Borrowing Multiple” means (a) in the case of a Borrowing denominated in US Dollars, \$1,000,000 and (b) in the case of a Borrowing denominated in Euro, €1,000,000.

“Borrowing Request” means a request by the Company for a Borrowing in accordance with Section 2.03.

“British Pounds Sterling” means the lawful currency of the United Kingdom.

“Business Day” means any day that is not a Saturday, Sunday or other day on which commercial banks in New York City are authorized or required by law to remain closed; provided, that (a) when used in connection with a LIBOR Loan, the term “Business Day” shall also exclude any day on which banks are not open for dealings in deposits in US Dollars in the London interbank market, (b) when used in connection with a EURIBOR Loan, the term “Business Day” shall also exclude any day on which the TARGET payment system is not open for the settlement of payments in Euro and (c) when used in connection with a Letter of Credit denominated in US Dollars or a Designated Foreign Currency, the term “Business Day” shall also exclude any day on which banks are not open for dealings in deposits in US Dollars or the applicable Designated Foreign Currency in the principal financial center in the applicable country of such currency.

“Change of Control” means (a) the acquisition of ownership, directly or indirectly, beneficially or of record, by any Person or group (within the meaning of the Securities Exchange Act of 1934 and the rules of the Securities and Exchange Commission thereunder as in effect on the date hereof) of shares representing more than 30% of the aggregate ordinary voting power represented by the issued and outstanding capital stock of the Company or (b) occupation of a majority of the seats (other than vacant seats) on the board of directors of the Company by Persons who were not (i) directors of the Company on the date hereof or (ii) nominated, appointed or approved prior to their election, by the board of directors of the Company.

“Change in Law” means (a) the adoption of any law, rule, regulation or treaty after the date of this Agreement, (b) any change in any law, rule, regulation or treaty or in the interpretation or application thereof by any Governmental Authority after the date of this Agreement or (c) compliance by any Lender or any Issuing Bank or by any lending office of such Lender or by such Lender’s or Issuing Bank’s holding company with any request, rule, guideline or directive (whether or not having the force of law) of any Governmental Authority made or issued after the date of this Agreement; provided that, notwithstanding anything herein to the contrary, (i) the Dodd-Frank Wall Street Reform and Consumer Protection Act and all requests, rules, guidelines or directives thereunder or issued in connection therewith and (ii) all requests, rules guidelines or directives concerning capital adequacy and liquidity promulgated by the Bank for International Settlements, the Basel Committee on Banking Regulations and Supervisory Practices (or any successor similar authority) or the United States financial regulatory authorities, in each case pursuant to Basel III, shall in each case be deemed to be a “Change in Law”, whether enacted, adopted, promulgated or issued before or after the date of this Agreement.

“Class”, when used in reference to (a) any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are Term Loans, Revolving Loans or loans of any new Class established pursuant to Section 2.09 and (b) any Commitment, refers to whether such Commitment is a Term Commitment, a Revolving Commitment or a commitment of any new Class established pursuant to Section 2.09.

“Code” means the Internal Revenue Code of 1986.

“Commitment” means a Term Commitment or a Revolving Commitment.

“Company” has the meaning assigned to such term in the heading of this Agreement.

“Confidential Information Memorandum” means the Confidential Information Memorandum dated October, 2017, distributed to the Lenders, together with the appendices thereto.

“Consolidated Debt” means all Debt of the Company and the Subsidiaries, determined on a consolidated basis.

“Consolidated EBITDA” means, for any period, the consolidated net income (loss) of the Company and the Subsidiaries for such period plus, to the extent deducted in computing such consolidated net income for such period, the sum (without duplication) of (a) Consolidated Interest Expense, (b) consolidated income tax expense, (c) depreciation and amortization expense, (d) stock-based employee compensation expense related to any grant of stock options or restricted stock to the extent deducted from such consolidated net income for such period pursuant to Financial Accounting Standards Board Accounting Standards Codification No. 718 (Compensation – Stock Compensation) and (e) extraordinary or non-recurring non-cash expenses or losses, minus, to the extent added in computing such consolidated net income for such period, extraordinary gains, all determined on a consolidated basis.

“Consolidated Interest Expense” means, for any period, the interest expense of the Company and the consolidated Subsidiaries for such period determined on a consolidated basis in accordance with GAAP, but excluding deferred financing fees.

“Consolidated Net Tangible Assets” means the total amount of assets that would be included on a consolidated balance sheet of the Company and the consolidated Subsidiaries (and which shall reflect the deduction of applicable reserves) after deducting therefrom all current liabilities of the Company and the consolidated Subsidiaries and all Intangible Assets.

“Consolidated Total Assets” means the total amount of assets that would be included on a consolidated balance sheet of the Company and the consolidated Subsidiaries.

“Control” means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of a Person, whether through the ability to exercise voting power, by contract or otherwise. “Controlling” and “Controlled” have meanings correlative thereto.

“Credit Party” means the Administrative Agent, the Issuing Banks and each other Lender.

“Debt” means, with respect to any Person and without duplication, all indebtedness of such Person for borrowed money or for the deferred purchase price of property or services, all accrued or contingent obligations in respect of letters of credit, all capitalized lease obligations, all indebtedness of others secured by assets of the Company or a Subsidiary, all guarantees of Debt of others (but excluding guarantees issued for customer advance payments) and all obligations under Hedging Agreements. For the avoidance of doubt, “Debt” shall not include (i) pension liabilities under any employee pension benefit plan and (ii) tender bid bonds, customer performance guarantees and similar suretyship obligations issued in the ordinary course of business that are not letters of credit and which, in each case, do not constitute a guarantee of any Debt of others.

“Default” means any event or condition which constitutes an Event of Default or which upon notice, lapse of time or both would, unless cured or waived, become an Event of Default.

“Defaulting Lender” means any Revolving Lender that (a) has failed, within two Business Days of the date required to be funded or paid, (i) to fund any portion of its Loans, (ii) to fund any portion of its participations in Letters of Credit or (iii) to pay to any Credit Party any other amount required to be paid by it hereunder, unless, in the case of clause (i) above, such Lender notifies the Administrative Agent in writing that such failure is the result of such Lender’s good faith determination that a condition precedent to funding (specifically identified in such writing, including, if applicable, by reference to a specific Default) has not been satisfied, (b) has notified the Company or any Credit Party in writing, or has made a public statement, to the effect that it does not intend or expect to comply with any of its funding obligations under this Agreement (unless such writing or public statement indicates that such position is based on such Lender’s good-faith determination that a condition precedent (specifically identified in such writing, including, if applicable, by reference to a specific Default) to funding a Loan cannot be satisfied) or generally under other agreements in which it commits to extend credit, (c) has failed, within three Business Days after request by a Credit Party made in good faith to provide a certification in writing from an authorized officer of such Lender that it will comply with its obligations (and is financially able to meet such obligations) to fund prospective Loans and participations in then outstanding Letters of Credit; provided that such Lender shall cease to be a Defaulting Lender pursuant to this clause (c) upon such Credit Party’s receipt of such certification in form and substance reasonably satisfactory to it and the Administrative Agent, (d) has (i) become the subject of a Bankruptcy Event or a Bail-In Action, (ii) had a receiver, conservator, trustee, administrator, assignee for the benefit of creditors or similar Person charged with reorganization or liquidation of its business or a custodian appointed for it or (iii) taken any action in furtherance of, or indicated its consent to, approval of or acquiescence in any such proceeding or appointment or (e) has a direct or indirect parent company that has (i) become the subject of a Bankruptcy Event or a Bail-In Action, (ii) had a receiver, conservator, trustee, administrator, assignee for the benefit of creditors or

similar Person charged with reorganization or liquidation of its business or a custodian appointed for it or (iii) taken any action in furtherance of, or indicated its consent to, approval of or acquiescence in any such proceeding or appointment; provided that (A) a Revolving Lender shall not be a Defaulting Lender under clause (e) above unless (1) such Lender shall have been requested, and shall have failed for five Business Days after such request, to provide cash collateral or make other arrangements satisfactory to the Company, the Administrative Agent or the Issuing Banks to ensure the performance of its obligations hereunder and (2) any one or more of the Company, the Administrative Agent or any Issuing Bank shall have notified the others and such Lender that such Lender is a Defaulting Lender and (B) a Revolving Lender shall not be a Defaulting Lender solely by virtue of the ownership or acquisition of any equity interest in that Revolving Lender or any direct or indirect parent company thereof by a Governmental Authority.

“Designated Foreign Currency” means Euro, British Pounds Sterling, Japanese Yen or any other currency (other than US Dollars) approved in writing by each Issuing Bank and the Administrative Agent, so long as such other currency is freely traded and convertible into US Dollars in the London or other offshore interbank market for such currency and a US Dollar Equivalent thereof can be calculated.

“Documentation Agents” means The Bank of Tokyo-Mitsubishi UFJ, Ltd., Barclays Bank PLC, DNB Bank ASA, New York Branch, TD Bank, N.A. and U.S. Bank National Association, in their capacities as the documentation agents with respect to the credit facility established hereto.

“Domestic Subsidiary” means any Subsidiary that is incorporated under the laws of the United States or its territories or possessions.

“EEA Financial Institution” means (a) any credit or financial institution established in any EEA Member Country that is subject to the supervision of an EEA Resolution Authority, (b) any entity established in an EEA Member Country that is a parent of an institution described in clause (a) of this definition or (c) any institution established in an EEA Member Country that is a subsidiary of an institution described in clause (a) or (b) of this definition and is subject to consolidated supervision with its parent.

“EEA Member Country” means (a) any member state of the European Union, (b) Iceland, (c) Liechtenstein and (d) Norway.

“EEA Resolution Authority” means any public administrative authority or any Person entrusted with public administrative authority of any EEA Member Country (including any delegee) having responsibility for the resolution of any EEA Financial Institution.

“Effective Date” means the date on which the conditions specified in Section 4.01 are satisfied (or waived in accordance with Section 9.02).

“Electronic Signature” means an electronic sound, symbol or process attached to, or associated with, a contract or other record and adopted by a Person with the intent to sign, authenticate or accept such contract or record.

“EMU Legislation” means the legislative measures of the European Union for the introduction of, changeover to or operation of the Euro in one or more member states.

“Environmental Laws” means all federal, state, local and foreign laws, rules and regulations relating to the release, emission, disposal, storage and related handling of waste materials, pollutants and hazardous substances.

“ERISA” means the Employee Retirement Income Security Act of 1974.

“ERISA Event” means (a) any “reportable event”, as defined in Section 4043 of ERISA or the regulations issued thereunder with respect to a Plan (other than an event for which the 30 day notice period is waived), (b) any failure by any Plan to satisfy the minimum funding standards defined in Section 412 of the Code or Section 302 of ERISA, whether or not waived, (c) the filing pursuant to Section 412(c) of the Code or Section 302(c) of ERISA of an application for a waiver of the minimum funding standard with respect to any Plan, (d) the incurrence by the Company or any member of an ERISA Group of any liability under Title IV of ERISA with respect to the termination of any Plan, (e) the receipt by the Company or any member of the ERISA Group from the PBGC or a plan administrator of any notice relating to an intention to terminate any Plan or Plans or to appoint a trustee to administer any Plan, (f) the incurrence by the Company or any member of the ERISA Group of any liability with respect to the withdrawal or partial withdrawal from any Plan or Multiemployer Plan or (g) the receipt by the Company or any member of the ERISA Group of any notice, or the receipt by any Multiemployer Plan from the Company or any member of the ERISA Group of any notice, concerning the imposition of Withdrawal Liability or a determination that a Multiemployer Plan is, or is expected to be, insolvent or in reorganization, within the meaning of Title IV of ERISA.

“ERISA Group” means all members of a controlled group of corporations and all trades or businesses (whether or not incorporated) under common control which, together with the Company, are treated as a single employer under Section 414 of the Code.

“EU Bail-In Legislation Schedule” means the EU Bail-In Legislation Schedule published by the Loan Market Association (or any successor Person), as in effect from time to time.

“EURIBO Rate” means, with respect to any EURIBOR Borrowing for any Interest Period, the applicable Screen Rate as of the Specified Time on the Quotation Day.

“EURIBOR”, when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the EURIBO Rate.

“Euro” or “€” means the single currency of the European Union as constituted by the Treaty on European Union and as referred to in the EMU Legislation.

“Event of Default” has the meaning assigned to such term in Article VII.

“Exchange Rate” means, on any day, for purposes of determining the US Dollar Equivalent of any Designated Foreign Currency, the rate at which such Designated Foreign Currency may be exchanged into US Dollars on such day determined by using the rate of exchange for the purchase of the US Dollars with such Designated Foreign Currency in the London foreign exchange market at or about 11:00 a.m. London time on such day as displayed by ICE Data Services as the “ask price”, or as displayed on such other information service which publishes that rate of exchange from time to time in place of ICE Data Services (or if such service ceases to be available, the equivalent of such amount in US Dollars determined in such manner as the Company and the Administrative Agent shall agree or, in the absence of such agreement, by the Administrative Agent using any method of determination it deems appropriate in its discretion).

“Excluded Subsidiary” means at any time (a) any Foreign Subsidiary, (b) any subsidiary of a Foreign Subsidiary, (c) any Domestic Subsidiary that is a disregarded entity for United States Federal income tax purposes substantially all of the assets of which consist of equity interests in one or more Foreign Subsidiaries, (d) any Subsidiary that is prohibited or restricted by applicable law from providing a guarantee of the Obligations or if such guarantee would require governmental (including regulatory) consent, approval, license or authorization, (e) any special purpose securitization vehicle (or similar entity), (f) any Subsidiary that is a not-for-profit organization, (g) any other Subsidiary with respect to which, in the reasonable judgment of the Administrative Agent (confirmed in writing by notice to the Company), the cost or other consequences (including any adverse tax consequences) of providing the Subsidiary Guarantee Agreement shall be excessive in view of the benefits to be obtained by the Lenders therefrom and (h) any other Subsidiaries acquired or organized after the Effective Date that, together with their own subsidiaries on a combined consolidated basis, shall not, individually or in the aggregate for all such Subsidiaries under this clause (h), have accounted for more than 5% of Consolidated Total Assets or more than 5% of the consolidated total revenues of the Company and the Subsidiaries at the end of, or for the period of four fiscal quarters ended with, the most recent fiscal quarter of the Company for which financial statements shall have been delivered pursuant to Section 5.06(a) or (b) (or, prior to the delivery of any such financial statements, at the end of or for the period of four fiscal quarters ended September 30, 2017).

“Excluded Taxes” means, with respect to any Lender or Issuing Bank, (a) income taxes imposed on (or measured by) its net income and franchise taxes imposed in lieu of net income taxes, in each case imposed by the United States of America (or any

political subdivision thereof), or by the jurisdiction (or any political subdivision thereof) under which such recipient is organized or in which its principal office or any lending office from which it makes Loans or issues Letters of Credit hereunder is located, or by reason of any present or former connection between such Lender or Issuing Bank, as the case may be, and the jurisdiction of the Governmental Authority imposing such Tax or any political subdivision or taxing authority thereof or therein (other than any such connection arising solely from such Lender or Issuing Bank, as the case may be, having executed, delivered, become a party to or performed its obligations or received a payment under, engaged in any other transaction pursuant to, or enforced, any Loan Document, or sold or assigned an interest in any Loan Document), (b) any branch profit taxes imposed by the United States of America or any similar tax imposed by any other jurisdiction described in clause (a) above, (c) any withholding tax that is imposed by the United States of America (or any political subdivision thereof) on payments by the Company from an office within such jurisdiction to the extent such tax is in effect and would apply as of the date such Lender becomes a party to this Agreement or relates to payments received by a new lending office designated by such Lender and is in effect and would apply at the time such lending office is designated, (d) any withholding tax that is attributable to such Lender's failure to timely comply with Section 2.16(f) or (e) any taxes imposed under FATCA, except, in the case of clause (c) above, to the extent that such Lender (or its assignor, if any) was entitled, at the time of designation of a new lending office (or assignment), to receive additional amounts from the Company with respect to such withholding tax pursuant to Section 2.16(a).

“Existing Credit Agreement” means the Credit Agreement dated as of June 25, 2013, and amended as of April 23, 2015, among the Company, the lenders from time to time party thereto and JPMCB, as administrative agent.

“Existing Letters of Credit” means the outstanding letters of credit set forth on Schedule 2.04.

“Exposure” means, with respect to any Lender, such Lender's Term Loan Exposure and Revolving Exposure.

“FATCA” means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with) and any current or future regulations or official interpretations thereof, any applicable intergovernmental agreements between a non-U.S. jurisdiction and the United States with respect thereto and any law, regulation, or other official guidance enacted in a non-U.S. jurisdiction relating to such an intergovernmental agreement, and any agreements entered into pursuant to Section 1471(b)(1) of the Code.

“Federal Funds Effective Rate” means, for any day, the rate calculated by the NYFRB based on such day's federal funds transactions by depository institutions (as determined in such manner as the NYFRB shall set forth on its public website from time to time) and published on the next succeeding Business Day by the NYFRB as the federal funds effective rate; provided that if such rate shall be less than zero, such rate shall be deemed to be zero for all purposes of this Agreement.

“Foreign Subsidiary” means any Subsidiary that is not incorporated under the laws of the United States or its territories or possessions.

“GAAP” means generally accepted accounting principles in the United States of America.

“Governmental Authority” means any nation or government, any federal, state, local or other political subdivision thereof and any entity exercising executive, legislative, judicial, taxing, regulatory or administrative functions of or pertaining to government (including any supra-national body exercising such powers or functions, such as the European Union or the European Central Bank).

“Guarantee Requirement” means, at any time, that the Subsidiary Guarantee Agreement (or a supplement referred to in Section 16 thereof) shall have been executed by each Subsidiary (other than any Excluded Subsidiary) existing at such time, shall have been delivered to the Administrative Agent and shall be in full force and effect; provided, however, that in the case of a Subsidiary that becomes subject to the Guarantee Requirement after the Effective Date, the Guarantee Requirement shall be satisfied with respect to such Subsidiary if a supplement to the Subsidiary Guarantee Agreement is executed by such Subsidiary, delivered to the Administrative Agent and in full force and effect no later than (a) 30 days after the date on which such Subsidiary becomes subject to the Guarantee Requirement or (b) such other date as the Administrative Agent may reasonably determine, but in any case no later than 60 days after the date on which such Subsidiary becomes subject to the Guarantee Requirement.

“Hedging Agreement” means any interest rate protection agreement, foreign currency exchange agreement or other interest or currency exchange rate hedging arrangement. The “principal amount” of the obligations of any Person in respect of any Hedging Agreement at any time shall be the maximum aggregate amount (giving effect to any netting agreements) that such Person would be required to pay if such Hedging Agreement were terminated at such time.

“Incremental Commitment” means an Incremental Revolving Commitment or an Incremental Term Commitment.

“Incremental Commitment Agreement” means an incremental commitment agreement, in form and substance reasonably satisfactory to the Administrative Agent, among the Company, the Administrative Agent and one or more Incremental Lenders, establishing Incremental Term Commitments or Incremental Revolving Commitments and effecting such other amendments hereto and to the other Loan Documents as are contemplated by Section 2.09.

“Incremental Lender” means an Incremental Revolving Lender or an Incremental Term Lender.

“Incremental Revolving Commitment” means, with respect to any Lender, the commitment, if any, of such Lender, established pursuant to an Incremental Commitment Agreement and Section 2.09, to make Revolving Loans pursuant to Section 2.01(b) and acquire participations in Letters of Credit pursuant to Section 2.04(d), expressed as an amount representing the maximum aggregate amount of such Lender’s Revolving Exposure under such Incremental Commitment Agreement.

“Incremental Revolving Commitment Effective Date” has the meaning assigned to such term in Section 2.09(c).

“Incremental Revolving Lender” means a Lender with an Incremental Revolving Commitment.

“Incremental Term Commitment” means, with respect to any Lender, the commitment, if any, of such Lender, established pursuant to an Incremental Commitment Agreement and Section 2.09, to make Incremental Term Loans, expressed as an amount representing the maximum aggregate amount of Incremental Term Loans to be made by such Lender.

“Incremental Term Lender” means a Lender with an Incremental Term Commitment or an outstanding Incremental Term Loan.

“Incremental Term Loan” means a Loan made by an Incremental Term Lender to the Company pursuant to Section 2.09.

“Indemnified Taxes” means Taxes other than (a) Excluded Taxes and (b) Other Taxes.

“Indemnitee” has the meaning assigned to such term in Section 9.03(b).

“Information” has the meaning assigned to such term in Section 9.12.

“Initial Loans” has the meaning assigned to such term in Section 2.09(c).

“Intangible Assets” means all assets of the Company and the consolidated Subsidiaries that would be treated as intangibles in conformity with GAAP on a consolidated balance sheet of the Company and the consolidated Subsidiaries.

“Interest Coverage Ratio” means, for any period, the ratio of (a) Consolidated EBITDA for such period to (b) Consolidated Interest Expense for such period.

“Interest Election Request” means a request by the Company to convert or continue a Borrowing in accordance with Section 2.07.

“Interest Payment Date” means (a) with respect to any ABR Loan, the last day of each March, June, September and December and (b) with respect to any LIBOR Loan or EURIBOR Loan, the last day of the Interest Period applicable to the Borrowing

of which such Loan is a part and, in the case of a LIBOR Borrowing or EURIBOR Borrowing with an Interest Period of more than three months' duration, each day prior to the last day of such Interest Period that occurs at intervals of three months' duration after the first day of such Interest Period.

“Interest Period” means, with respect to any LIBOR Borrowing or EURIBOR Borrowing, the period commencing on the date of such Borrowing and ending on the numerically corresponding day in the calendar month that is one, two, three or six months thereafter (or, if available from each applicable Lender, 12 months thereafter), as the Company may elect; provided that (i) if any Interest Period would end on a day other than a Business Day, such Interest Period shall be extended to the next succeeding Business Day unless such next succeeding Business Day would fall in the next calendar month, in which case such Interest Period shall end on the next preceding Business Day and (ii) any Interest Period that commences on the last Business Day of a calendar month (or on a day for which there is no numerically corresponding day in the last calendar month of such Interest Period) shall end on the last Business Day of the last calendar month of such Interest Period. For purposes hereof, the date of a Borrowing initially shall be the date on which such Borrowing is made, and thereafter shall be the effective date of the most recent conversion or continuation of such Borrowing.

“Interpolated Screen Rate” means, with respect to any LIBOR Loan or any EURIBOR Loan, in each case for any Interest Period, a rate per annum which results from interpolating on a linear basis between: (a) the applicable Screen Rate for the longest maturity for which a Screen Rate is available that is shorter than such Interest Period and (b) the applicable Screen Rate for the shortest maturity for which a Screen Rate is available that is longer than such Interest Period, in each case as of the Specified Time on the Quotation Day.

“Issuing Bank” means each of JPMCB, Bank of America, N.A., HSBC Bank, USA, National Association and Citizens Bank, N.A., and any other Lenders (or any Affiliates of Lenders) that shall have become Issuing Banks hereunder as provided in Section 2.04(i) (other than any Person that shall have ceased to be an Issuing Bank as provided in Section 2.04(i)), each in its capacity as the issuer of Letters of Credit hereunder. Each Issuing Bank may, in its discretion, arrange for one or more Letters of Credit to be issued by Affiliates of such Issuing Bank, in which case the term “Issuing Bank” shall include any such Affiliate with respect to Letters of Credit issued by such Affiliate.

“Japanese Yen” means the lawful currency of Japan.

“JPMCB” means JPMorgan Chase Bank, N.A. and its successors.

“Judgment Currency” has the meaning assigned to such term in Section 9.13(b).

“LC Commitment” means (a) in the case of each Issuing Bank that is a party hereto in such capacity as of the Effective Date, US\$12,500,000 and (b) in the case of any other Issuing Bank, such amount as such Issuing Bank and the Company may agree.

“LC Disbursement” means a payment made by an Issuing Bank in respect of a Letter of Credit.

“LC Exposure” means at any time the sum of (a) the aggregate US Dollar Equivalents of the undrawn amounts of all outstanding Letters of Credit at such time and (b) the aggregate US Dollar Equivalents of the amounts of all LC Disbursements that have not yet been reimbursed by or on behalf of the Company or the applicable Subsidiary at such time. The LC Exposure of any Revolving Lender at any time shall be such Revolving Lender’s Applicable Percentage of the aggregate LC Exposure.

“Lenders” means the Persons listed on Schedule 2.01 and any other Person that shall have become a party hereto pursuant to an Assignment and Assumption or as provided in Section 2.09, other than any such Person that shall have ceased to be a party hereto pursuant to an Assignment and Assumption.

“Letter of Credit” means an Existing Letter of Credit and any letter of credit issued pursuant to this Agreement on behalf of Lenders holding Revolving Commitments.

“Leverage Ratio” means, at any time, the ratio of (a) Consolidated Debt at such time to (b) Consolidated EBITDA for the most recent period of four consecutive fiscal quarters of the Company ended at or prior to such time; provided, that in the event any Material Acquisition shall have been completed during such period of four consecutive fiscal quarters, the Leverage Ratio shall be computed giving pro forma effect to such Material Acquisition (and to any related incurrence or repayment of Debt) as if it had been completed at the beginning of such period.

“Leverage Ratio Increase Election” has the meaning assigned to such term in Section 6.07.

“Leverage Ratio Increase Period” has the meaning assigned to such term in Section 6.07.

“LIBO Rate” means, with respect to any LIBOR Borrowing for any Interest Period, the applicable Screen Rate as of the Specified Time on the Quotation Day.

“LIBOR”, when used in reference to any Loan or Borrowing, refers to whether such Loan, or the Loans comprising such Borrowing, are bearing interest at a rate determined by reference to the Adjusted LIBO Rate.

“Lien” means, with respect to any asset, any mortgage, deed of trust, lien, pledge, hypothecation, encumbrance, charge or security interest in, on or of such asset.

“Loan Documents” means this Agreement, the Subsidiary Guarantee Agreement, each Incremental Commitment Agreement, each promissory note delivered pursuant to this Agreement and each Loan Modification Agreement.

“Loan Modification Agreement” means a Loan Modification Agreement, in form and substance reasonably satisfactory to the Administrative Agent, among the Company, the Administrative Agent and one or more Accepting Lenders, effecting one or more Permitted Amendments and such other amendments hereto and to the other Loan Documents as are contemplated by Section 2.20.

“Loan Modification Offer” has the meaning set forth in Section 2.20(a).

“Loan Parties” means the Company and the Subsidiary Guarantors.

“Loans” means the loans made by the Lenders to the Company pursuant to this Agreement.

“Local Time” means (a) with respect to a Loan or Borrowing denominated in US Dollars or any Letter of Credit, New York City time and (b) with respect to a Loan or Borrowing denominated in Euro or any other Designated Foreign Currency, London time.

“Margin Stock” has the meaning assigned to such term in Regulation U issued by the Board.

“Material Acquisition” means (a) the acquisition by the Company or a Subsidiary of assets of or an interest in another Person or (b) the merger or consolidation of the Company with another corporation; provided that, in each case, the aggregate consideration therefor involves cash in the amount of \$400,000,000 or more.

“Material Adverse Effect” means (a) a material adverse effect on the business, assets, operations or financial condition of the Company and the Subsidiaries, taken as a whole or (b) a material adverse effect on the validity or enforceability of any one or more provisions of any of the Loan Documents that, taken as a whole, are material.

“Material Debt” means Consolidated Debt in an aggregate principal amount of \$30,000,000 or more.

“Material Subsidiary” means each Subsidiary of the Company, other than Subsidiaries designated by the Company from time to time that in the aggregate do not account for more than 15% of the consolidated revenues of the Company and its Subsidiaries for the period of four fiscal quarters most recently ended or more than 15% of the consolidated assets of the Company and its Subsidiaries at the end of such period.

“Maturity Date” means November 30, 2022.

“MNPI” means material information concerning the Company and the Subsidiaries and their securities that has not been disseminated in a manner making it available to investors generally, within the meaning of Regulation FD under the Securities Act of 1933 and the Securities Exchange Act of 1934.

“Multiemployer Plan” means a multiemployer plan as defined in Section 4001(a)(3) of ERISA.

“Non-Defaulting Lender” means, at any time, any Revolving Lender that is not a Defaulting Lender at such time.

“Non-US Lender” means a Lender that is not a US Person.

“NYFRB” means the Federal Reserve Bank of New York.

“NYFRB Rate” means, for any day, the greater of (a) the Federal Funds Effective Rate in effect on such day and (b) the Overnight Bank Funding Rate in effect on such day (or for any day that is not a Business Day, on the immediately preceding Business Day); provided that if none of such rates are published for any day that is a Business Day, the term “NYFRB Rate” shall mean the rate for a federal funds transaction quoted at 11:00 a.m., New York City time, on such day received by the Administrative Agent from a Federal funds broker of recognized standing selected by it in a manner consistent with prevailing market practice for syndicated loans; provided, further, that if any of the aforesaid rates shall be less than zero, such rate shall be deemed to be zero for purposes of this Agreement.

“Obligations” means the due and punctual payment of (a) the principal of and premium, if any, and interest (including interest accruing during the pendency of any bankruptcy, insolvency, receivership or other similar proceeding, regardless of whether allowed or allowable in such proceeding) on the Loans made to the Company, when and as due, whether at maturity, by acceleration, upon one or more dates set for prepayment or otherwise, (b) each payment required to be made by the Company under this Agreement in respect of any Letter of Credit, when and as due, including payments in respect of reimbursement of disbursements, interest thereon and obligations to provide cash collateral and (c) all other monetary obligations, including fees, costs, expenses and indemnities, whether primary, secondary, direct, contingent, fixed or otherwise (including monetary obligations incurred during the pendency of any bankruptcy, insolvency, receivership or other similar proceeding, regardless of whether allowed or allowable in such proceeding), of the Loan Parties under this Agreement and the other Loan Documents.

“Other Taxes” means any and all present or future recording, stamp, documentary, excise, transfer, sales, property or similar taxes, charges or levies arising from any payment made hereunder or from the execution, delivery or enforcement of, or otherwise with respect to, this Agreement or any other Loan Document, except such taxes, charges or levies incurred by reason of a voluntary sale or assignment (other than an assignment made pursuant to Section 2.18(b)) of an interest in a Loan Document not effected following the occurrence and during the continuance of an Event of Default.

“Overnight Bank Funding Rate” means, for any day, the rate comprised of both overnight federal funds and overnight Eurodollar borrowings by US-managed banking offices of depository institutions, as such composite rate shall be determined by the NYFRB as set forth on its public website from time to time, and published on the next succeeding Business Day by the NYFRB as an overnight bank funding rate (from and after such date as the NYFRB shall commence to publish such composite rate).

“Participant” has the meaning assigned to such term in Section 9.04(e).

“Participant Register” has the meaning assigned to such term in Section 9.04(e).

“PBGC” means the Pension Benefit Guaranty Corporation referred to and defined in ERISA and any successor entity performing similar functions.

“Permitted Amendment” means an amendment to this Agreement and the other Loan Documents, effected in connection with a Loan Modification Offer pursuant to Section 2.20, providing for an extension of the Maturity Date applicable to the Loans and/or Commitments of the Accepting Lenders and, in connection therewith, (a) an adjustment to the Applicable Rate with respect to the Loans and/or Commitments of the Accepting Lenders and/or (b) an adjustment to the fees payable to, or the inclusion of new fees to be payable to, the Accepting Lenders.

“Person” means any natural person, corporation, limited liability company, trust, joint venture, association, company, partnership, Governmental Authority or other entity.

“Plan” means at any time an employee pension benefit plan which is covered by Title IV of ERISA or subject to the minimum standards under Section 412 of the Internal Revenue Code and is either (a) maintained by a member of the ERISA Group for employees of a member of the ERISA Group or (b) maintained pursuant to a collective bargaining agreement or any other arrangement under which more than one employer makes contributions and to which a member of the ERISA Group is then making or accruing an obligation to make contributions or has within the preceding five plan years made contributions.

“Platform” has the meaning set forth in Section 9.17(b).

“Prime Rate” means the rate of interest per annum publicly announced from time to time by JPMCB as its prime rate in effect at its principal office in New York City. Each change in the Prime Rate shall be effective from and including the date such change is publicly announced as being effective.

“Private Side Lender Representatives” means, with respect to any Lender, representatives of such Lender that are not Public Side Lender Representatives.

“Public Side Lender Representatives” means, with respect to any Lender, representatives of such Lender that do not wish to receive MNPI.

“Quotation Day” means, in respect of (a) the determination of the LIBO Rate for any Interest Period, the day that is two Business Days prior to the first day of such Interest Period and (b) the determination of the EURIBO Rate for any Interest Period, the day which is two Target Operating Days prior to the first day of such Interest Period; in each case unless market practice changes for loans in the applicable currency priced by reference to rates quoted in the Relevant Interbank Market, in which case the Quotation Day for such currency shall be determined by the Administrative Agent (in consultation with the Company) in accordance with market practice for such loans priced by reference to rates quoted in the relevant interbank market (and if quotations would normally be given by leading banks for such loans priced by reference to rates quoted in the relevant interbank market on more than one day, the Quotation Day shall be the last of those days).

“Register” has the meaning set forth in Section 9.04(c).

“Reimbursement Obligation” has the meaning set forth in Section 9.02(b).

“Related Fund” means, with respect to any Lender that is a fund that invests in bank loans, any other fund that invests in bank loans and is managed by the same investment advisor as such Lender or by an Affiliate of such investment advisor.

“Related Parties” means, with respect to any specified Person, such Person’s Affiliates and the respective directors, officers, members, partners, trustees, employees, trustees, agents and advisors of such Person and such Person’s Affiliates.

“Relevant Interbank Market” means (a) with respect to US Dollars, the London interbank market and (b) with respect to Euro, the European interbank market.

“Required Lenders” means, at any time, Lenders having aggregate Term Loans, Revolving Exposures and unused Commitments representing more than 50% of the sum of the total Term Loans, Revolving Exposures and unused Commitments at such time.

“Responsible Officer” of any Person, means the chief executive officer, the chief financial officer, the principal accounting officer, the treasurer or the controller of such Person, and any other officer of such Person with responsibility for the administration of the obligations of such Person under this Agreement.

“Revolving Availability Period” means the period from and including the Effective Date to but excluding the earlier of the Maturity Date and the date of termination of the Revolving Commitments.

“Revolving Borrowing” means a Borrowing comprised of Revolving Loans.

“Revolving Commitment” means, with respect to each Revolving Lender, the commitment of such Revolving Lender to make Revolving Loans pursuant to Section 2.01(b) and acquire participations in Letters of Credit pursuant to Section 2.04(d), expressed as an amount representing the maximum aggregate amount of such Revolving Lender’s Revolving Exposure hereunder, as such commitment may be (a) reduced from time to time pursuant to Section 2.08, (b) increased pursuant to Section 2.09 and (c) reduced or increased from time to time pursuant to assignments by or to such Lender pursuant to Section 9.04. The initial amount of each Revolving Lender’s Revolving Commitment is set forth on Schedule 2.01, or in the Assignment and Assumption or the Incremental Commitment Agreement pursuant to which such Revolving Lender shall have assumed its Revolving Commitment, as applicable. The aggregate amount of the Revolving Commitments on the date hereof is \$1,500,000,000.

“Revolving Exposure” means, with respect to any Revolving Lender at any time, the sum at such time, without duplication, of (a) such Revolving Lender’s Applicable Percentage of the sum of the US Dollar Equivalents of the principal amounts of the outstanding Revolving Loans and (b) the aggregate amount of such Revolving Lender’s LC Exposure.

“Revolving Lender” means a Lender with a Revolving Commitment or Revolving Exposure.

“Revolving Loan” means a Loan made by a Lender pursuant to Section 2.01(b). Each Revolving Loan shall be shall be denominated in US Dollars or Euro and shall be a LIBOR Loan, a EURIBOR Loan or an ABR Loan.

“Sale and Leaseback Transaction” means any arrangement whereby the Company or a Subsidiary, directly or indirectly, shall sell or transfer any property, real or personal, used or useful in its business, whether now owned or hereafter acquired, and thereafter rent or lease such property or other property which it intends to use for substantially the same purpose or purposes as the property being sold or transferred.

“Sanctioned Country” means, at any time, a country, region or territory which is itself the subject or target of Sanctions that are applicable to transactions with such country or Persons operating, organized or resident therein generally, and not merely to transactions with specifically designated Persons or industries therein (at the date of this Agreement, Crimea, Cuba, Iran, North Korea, Sudan and Syria).

“Sanctioned Person” means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury, the U.S. Department of State, the European Union or Her Majesty’s Treasury of the United Kingdom, (b) any Person operating, organized, located or resident in a Sanctioned Country or (c) any Person known to the Company to be controlled by any Person or Persons described in the foregoing clauses (a) and (b).

“Sanctions” means all economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by (a) the U.S. government, including those administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State or (b) the European Union or Her Majesty’s Treasury of the United Kingdom.

“Screen Rate” means (a) in respect of the LIBO Rate for any Interest Period, a rate per annum equal to the London interbank offered rate as administered by the ICE Benchmark Administration (or any other Person that takes over the administration of such rate) for deposits in the applicable currency with a term equivalent to such Interest Period as displayed on the Reuters screen page that displays such rate (currently Reuters Screen Page LIBOR01 or LIBOR02) (or, in the event such rate does not appear on a page of the Reuters screen, on the appropriate page of such other information service that publishes such rate as shall be selected by the Administrative Agent from time to time in its reasonable discretion) and (b) in respect of the EURIBO Rate for any Interest Period, the rate per annum determined by the Banking Federation of the European Union for such Interest Period as set forth on the Reuters screen page that displays such rate (currently EURIBOR01) (or, in the event such rate does not appear on a page of the Reuters screen, on the appropriate page of such other information service that publishes such rate as shall be selected by the Administrative Agent from time to time in its reasonable discretion). If no Screen Rate shall be available for a particular Interest Period but Screen Rates shall be available for maturities both longer and shorter than such Interest Period, then the Screen Rate for such Interest Period shall be the Interpolated Screen Rate. Notwithstanding the foregoing, if the Screen Rate, determined as provided above, would be less than zero, the Screen Rate shall for all purposes of this Agreement be zero.

“Specified Time” means (a) with respect to the LIBO Rate, 11:00 a.m., London time and (b) with respect to the EURIBO Rate, 11:00 a.m., Frankfurt time.

“Statutory Reserve Rate” means a fraction (expressed as a decimal), the numerator of which is the number one and the denominator of which is the number one minus the aggregate of the maximum reserve percentages (including any marginal, special, emergency or supplemental reserves) expressed as a decimal to which the Administrative Agent is subject, for eurocurrency funding (currently referred to as “Eurocurrency Liabilities” in Regulation D of the Board of Governors of the Federal Reserve System of the United States of America). Such reserve percentages include, but are not limited to, those imposed pursuant to such Regulation D. LIBOR Loans shall be deemed to constitute LIBOR funding and to be subject to such reserve requirements without benefit of or credit for proration, exemptions or offsets that may be available from time to time to any Lender under such Regulation D or any comparable regulation. The Statutory Reserve Rate shall be adjusted automatically on and as of the effective date of any change in any reserve percentage.

“Subsequent Borrowings” has the meaning assigned to such term in Section 2.09(c).

“subsidiary” means, with respect to any Person, any entity with respect to which such Person alone owns, such Person or one or more of its subsidiaries together own, or such Person and any Person Controlling such Person together own, in each case directly or indirectly, capital stock or other equity interests having ordinary voting power to elect a majority of the members of the board of directors of such corporation or other entity or having a majority interest in the capital or profits of such corporation or other entity.

“Subsidiary” means any subsidiary of the Company.

“Subsidiary Guarantee Agreement” means a Subsidiary Guarantee Agreement substantially in the form of Exhibit B, and all supplements thereto made by the Subsidiary Guarantors in favor of the Administrative Agent for the benefit of the Lenders.

“Subsidiary Guarantors” means each Person listed on Schedule 1.01 and each other Person that becomes party to a Subsidiary Guarantee Agreement as a Subsidiary Guarantor, and the permitted successors and assigns of each such Person.

“Syndication Agents” means JPMCB, Bank of America, N.A., HSBC Bank USA, National Association and Citizens Bank, N.A., in their capacities as the syndication agents with respect to the credit facility established hereby.

“TARGET” means the Trans-European Automated Real Time Gross Settlement Express Transfer (TARGET) payment system.

“Target Operating Day” means any day on which banks in London are open for general banking business and is not (a) a Saturday or Sunday, (b) Christmas Day or New Year’s Day or (c) any other day on which the TARGET is not operating (as determined by the Administrative Agent).

“Taxes” means any and all present or future taxes, levies, imposts, duties, deductions, withholdings, assessments, fees or other charges imposed by any Governmental Authority, including any interest, additions to tax or penalties applicable thereto.

“Term Borrowing” means a Borrowing comprised of Term Loans.

“Term Commitment” means, with respect to each Term Lender, the commitment of such Term Lender to make Term Loans pursuant to Section 2.01(a), as such commitment may be (a) reduced from time to time pursuant to Section 2.08 and (b) reduced or increased from time to time pursuant to assignments by or to such Lender pursuant to Section 9.04. The initial amount of each Term Lender’s Term Commitment is set forth on Schedule 2.01, or in the Assignment and Assumption pursuant to which such Term Lender shall have assumed its Term Commitment, as applicable. The aggregate amount of the Term Commitments on the date hereof is \$300,000,000.

“Term Lender” means a Lender with a Term Commitment.

“Term Loan” means a Loan made by a Term Lender pursuant to Section 2.01(a).

“Term Loan Exposure” means, with respect to any Term Lender at any time, the principal amount of such Lender’s outstanding Term Loans.

“Transactions” means the execution, delivery and performance by the Loan Parties of the Loan Documents, the borrowing of Loans, the issuance of Letters of Credit hereunder and the use of the proceeds of such Loans and such Letters of Credit.

“Type”, when used in reference to any Loan or Borrowing, refers to whether the rate of interest on such Loan, or on the Loans comprising such Borrowing, is determined by reference to the Adjusted LIBO Rate, the EURIBO Rate or the Alternate Base Rate.

“Unfunded Liabilities” means, (a) in the case of a single-employer Plan which is covered by Title IV of ERISA, the amount, if any, by which the present value of all accumulated benefit obligations accrued to the date of determination under such Plan exceeds the fair market value of all assets of such Plan allocable to such benefits as of such date calculated in accordance with GAAP and based on the assumptions used for financial reporting purposes under applicable accounting and reporting standards and (b) in the case of a Multiemployer Plan, the Withdrawal Liability of the Company and the Subsidiaries calculated as set forth in Title IV of ERISA.

“USA PATRIOT Act” means the USA PATRIOT Improvement and Reauthorization Act, Title III of Pub. L. 109-177 (signed into law March 9, 2009).

“US Corporation” means a corporation organized and existing under the laws of the United States, any state thereof or the District of Columbia.

“US Dollar Equivalent” means, on any date of determination, (a) with respect to any amount in US Dollars, such amount and (b) with respect to any amount in any Designated Foreign Currency, the equivalent in US Dollars of such amount, determined by the Administrative Agent pursuant to Section 1.05 using the Exchange Rate with respect to such Designated Foreign Currency at the time in effect under the provisions of such Section.

“US Dollars” or “\$” means the lawful money of the United States of America.

“US Person” means a “United States person” within the meaning of Section 7701(a)(30) of the Code.

“Withdrawal Liability” means liability to a Multiemployer Plan as a result of a complete or partial withdrawal from such Multiemployer Plan, as such terms are defined in Part I of Subtitle E of Title IV of ERISA.

“Withholding Agent” means any Loan Party and the Administrative Agent.

“Write-Down and Conversion Powers” means, with respect to any EEA Resolution Authority, the write-down and conversion powers of such EEA Resolution Authority from time to time under the Bail-In Legislation for the applicable EEA Member Country, which write-down and conversion powers are described in the EU Bail-In Legislation Schedule.

Section 1.02. Classification of Loans and Borrowings. For purposes of this Agreement, Loans may be classified and referred to by Class (e.g., a “Revolving Loan”) or by Type (e.g., a “LIBOR Loan”) or by Class and Type (e.g., a “LIBOR Revolving Loan”). Borrowings also may be classified and referred to by Class (e.g., a “Revolving Borrowing”) or by Type (e.g., a “LIBOR Borrowing”) or by Class and Type (e.g., a “LIBOR Revolving Borrowing”).

Section 1.03. Terms Generally. The definitions of terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words “include”, “includes” and “including” shall be deemed to be followed by the phrase “without limitation”. The word “will” shall be construed to have the same meaning and effect as the word “shall”. Unless the context requires otherwise (a) any definition of or reference to any agreement, law, instrument or other document herein shall be construed as referring to such agreement, law, instrument or other document as from time to time amended, supplemented or otherwise modified (subject to any restrictions on such amendments, supplements or modifications set forth herein), (b) any reference herein to any Person shall be construed to include such Person’s successors and assigns, (c) the words “herein”, “hereof” and “hereunder” and words of similar import shall be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (d) all references herein to Articles, Sections, Exhibits and Schedules shall be construed to refer to Articles and Sections of, and Exhibits and Schedules to, this Agreement and (e) the words “asset” and “property” shall be construed to have the same meaning and effect and to refer to any and all tangible and intangible assets and properties, including cash, securities, accounts and contract rights.

Section 1.04. Accounting Terms: GAAP. Except as otherwise expressly provided herein, all terms of an accounting or financial nature shall be construed in accordance with GAAP as in effect from time to time; provided that if the Company notifies the Administrative Agent that the Company requests an amendment to any provision hereof to eliminate the effect of any change occurring after the date hereof in GAAP or in the application thereof on the operation of such provision (or if the Administrative Agent notifies the Company that the Required Lenders request an amendment to any provision hereof for such purpose), regardless of whether any such notice is given before or after such change in GAAP or in the application thereof, then the parties hereto shall negotiate in good faith to amend this Agreement to eliminate the effect of such change on the operation of such provision and until such provision shall have been amended or such notice withdrawn, such provision shall be interpreted on the

basis of GAAP as in effect and applied immediately before such change shall have become effective. Notwithstanding any other provision contained herein, all terms of an accounting or financial nature used herein shall be construed, and all computations of amounts and ratios referred to herein shall be made, (A) without giving effect to (x) any election under Financial Accounting Standards Board Accounting Standards Codification 825 (or any other Accounting Standards Codification having a similar result or effect) (and related interpretations) to value any Debt at “fair value”, as defined therein, or (y) any other accounting principle that results in any Debt being reflected on a balance sheet at an amount less than the stated principal amount thereof (or, in the case of Debt issued at a discount (other than an underwriting discount) to stated principal amount, the issue price thereof plus accreted discount), (B) without giving effect to any treatment of Debt in respect of convertible debt instruments under Accounting Standards Codification 470-20 (or any other Accounting Standards Codification or Financial Accounting Standard having a similar result or effect) (and related interpretations) to value any such Debt in a reduced or bifurcated manner as described therein, and such Debt shall at all times be valued at the full stated principal amount thereof, and (C) without giving effect to any change in accounting for leases pursuant to GAAP resulting from the implementation of Financial Accounting Standards Board ASU No. 2016-02, Leases (Topic 842), to the extent such adoption would require treating any lease (or similar arrangement conveying the right to use) as a capital lease where such lease (or similar arrangement) would not have been required to be so treated under GAAP as in effect on December 31, 2015.

Section 1.05. Exchange Rates. The Administrative Agent shall determine the US Dollar Equivalent of any Borrowing denominated in a currency other than US Dollars as of the date of the commencement of the initial Interest Period therefor and as of the date of the commencement of each subsequent Interest Period therefor, in each case using the Exchange Rate for such currency in relation to US Dollars in effect on the date that is three Business Days prior to the date on which the applicable Interest Period shall commence, and each such amount shall, except as provided in the last two sentences of this Section, be the US Dollar Equivalent of such Borrowing until the next required calculation thereof pursuant to this sentence. The Administrative Agent shall determine the US Dollar Equivalent of any Letter of Credit denominated in a currency other than US Dollars as of the date such Letter of Credit is issued, amended to increase its face amount, extended or renewed and as of the last Business Day of each subsequent calendar quarter, in each case using the Exchange Rate for such currency in relation to US Dollars in effect on the date that is three Business Days prior to the date on which such Letter of Credit is issued, amended to increase its face amount, extended or renewed and as of the last Business Day of such subsequent calendar quarter, as the case may be, and each such amount shall, except as provided in the last two sentences of this Section, be the US Dollar Equivalent of such Letter of Credit until the next required calculation thereof pursuant to this sentence. Notwithstanding the foregoing, for purposes of any determination under Article V, Article VI (other than Sections 6.07 and 6.08) or any determination under any other provision of this Agreement expressly requiring the use of a current exchange rate, all amounts incurred, outstanding or proposed to be incurred or outstanding in currencies other than US Dollars shall be translated into US Dollars at currency exchange rates in effect on the date of such determination. For purposes of Sections 6.07 and 6.08, amounts in currencies other than US Dollars shall be translated into US Dollars at the currency exchange rates used in preparing the Company’s annual and quarterly financial statements.

ARTICLE II

The Credits

Section 2.01. Commitments. (a) Subject to the terms and conditions set forth herein, each Term Lender agrees to make a Term Loan to the Company in US Dollars on the Effective Date in a principal amount equal to its Term Commitment. Amounts repaid or prepaid in respect of Term Loans may not be reborrowed.

(b) Subject to the terms and conditions set forth herein, each Revolving Lender agrees to make Revolving Loans to the Company from time to time during the Revolving Availability Period in US Dollars or Euro in an aggregate principal amount at any time outstanding that will not result in (i) the Revolving Exposure of any Lender exceeding its Revolving Commitment or (ii) the Aggregate Revolving Exposure exceeding the aggregate amount of the Revolving Commitments. Within the foregoing limits and subject to the terms and conditions set forth herein, the Company may borrow, prepay and reborrow Revolving Loans.

Section 2.02. Loans and Borrowings. (a) Each Term Loan shall be made as part of a Borrowing consisting of Term Loans of the same Type made by the Term Lenders ratably in accordance with their respective Term Commitments. Each Revolving Loan shall be made as part of a Borrowing consisting of Revolving Loans of the same Type made by the Revolving Lenders ratably in accordance with their respective Revolving Commitments. The failure of any Lender to make any Loan required to be made by it shall not relieve any other Lender of its obligations hereunder; provided that the Commitments of the Lenders are several and no Lender shall be responsible for any other Lender's failure to make Loans as required hereunder.

(b) Subject to Section 2.13, (i) each Term Borrowing shall be comprised entirely of LIBOR Loans or ABR Loans as the Company may request in accordance herewith and (ii) each Revolving Borrowing shall be comprised entirely of (A) in the case of Loans denominated in US Dollars, LIBOR Loans or ABR Loans as the Company may request in accordance herewith, and (B) in the case of Loans denominated in Euro, EURIBOR Loans. Each Lender at its option may make any Loan by causing any domestic or foreign branch or Affiliate of such Lender to make such Loan (and in the case of an Affiliate, the provisions of Sections 2.13, 2.14, 2.15 and 2.16 shall apply to such Affiliate to the same extent as to such Lender); provided that any exercise of such option shall not affect the obligation of the Company to repay such Loan in accordance with the terms of this Agreement.

(c) At the commencement of each Interest Period for any Borrowing, such Borrowing shall be in an aggregate amount that is at least equal to the Borrowing Minimum and an integral multiple of the Borrowing Multiple; provided that an ABR

Revolving Borrowing may be made in an aggregate amount that is equal to the aggregate available Revolving Commitments. Borrowings of more than one Type and Class may be outstanding at the same time; provided that there shall not at any time be more than a total of 12 LIBOR and EURIBOR Borrowings outstanding.

(d) Notwithstanding any other provision of this Agreement, the Company shall not be entitled to request, or to elect to convert or continue, any Borrowing if the Interest Period requested with respect thereto would end after the Maturity Date.

Section 2.03. Notice of Borrowings. To request a Borrowing, the Company shall notify the Administrative Agent of such request in writing, by facsimile or other electronic communication, or, except in the case of a Borrowing denominated in Euro, by telephone (a) in the case of a LIBOR Borrowing or a EURIBOR Borrowing, not later than 12:00 noon, Local Time, three Business Days before the date of the proposed Borrowing and (b) in the case of an ABR Borrowing, not later than 1:00 p.m., Local Time, on the Business Day of the proposed Borrowing. Each such Borrowing Request shall be irrevocable, and, in the case of a telephonic request, shall be confirmed promptly by hand delivery, facsimile or other electronic communication to the Administrative Agent of a written Borrowing Request in a form approved by the Administrative Agent and signed by the Company. Each such Borrowing Request shall specify the following information in compliance with Section 2.02:

- (i) whether the requested Borrowing is to be a Term Borrowing or Revolving Borrowing;
- (ii) the currency and aggregate principal amount of the requested Borrowing;
- (iii) the date of the requested Borrowing, which shall be a Business Day;
- (iv) the Type of the requested Borrowing;
- (v) in the case of a LIBOR Borrowing or EURIBOR Borrowing, the initial Interest Period to be applicable thereto, which shall be a period contemplated by the definition of the term "Interest Period"; and
- (vi) the location and number of the Company's account to which funds are to be disbursed, which shall comply with the requirements of Section 2.05.

If no currency is specified with respect to any requested Revolving Borrowing, then the Company shall be deemed to have selected US Dollars. If no election as to the Type of a Borrowing denominated in US Dollars is specified, then the requested Borrowing shall be an ABR Borrowing. If no Interest Period is specified with respect to any requested LIBOR Borrowing or EURIBOR Borrowing, then the Company shall be deemed to have selected an Interest Period of one month's duration. Promptly following receipt of a Borrowing Request in accordance with this Section, the Administrative Agent shall advise each Lender that will make a Loan as part of the requested Borrowing of the details thereof and of the amount of the Loan to be made by such Lender as part of the requested Borrowing.

Section 2.04. Letters of Credit. (a) General. Subject to the terms and conditions set forth herein, the Company may request the issuance (or the amendment, renewal or extension) of Letters of Credit denominated in US Dollars or any Designated Foreign Currency, in any case in a form and on terms reasonably acceptable to the Administrative Agent and the applicable Issuing Bank, at any time and from time to time during the Revolving Availability Period. In the event of any inconsistency between this Agreement and any form of letter of credit application or other agreement submitted by the Company to, or entered into by the Company with, an Issuing Bank relating to any Letter of Credit, the terms and conditions of this Agreement shall control. A Letter of Credit issued by an Issuing Bank will only be of a type approved for issuance hereunder by such Issuing Bank. The Existing Letters of Credit will, for all purposes of this Agreement, be deemed to have been issued hereunder on the Effective Date and will, for all purposes of this Agreement, constitute Letters of Credit.

(b) Notice of Issuance, Amendment, Renewal, Extension; Certain Conditions. To request the issuance of a Letter of Credit (or the amendment, renewal or extension of an outstanding Letter of Credit), the Company shall deliver by hand or facsimile (or transmit by electronic communication, if arrangements for doing so have been approved by the Issuing Bank) to an Issuing Bank and the Administrative Agent (at least four Business Days prior to the requested date of issuance, amendment, renewal or extension) a notice requesting the issuance of a Letter of Credit, or identifying the Letter of Credit to be amended, renewed or extended, the date of issuance, amendment, renewal or extension (which shall be a Business Day), the date on which such Letter of Credit is to expire (which shall comply with paragraph (c) of this Section), the currency and amount of such Letter of Credit, the name and address of the beneficiary thereof and such other information as shall be necessary to enable the Issuing Bank to prepare, amend, renew or extend such Letter of Credit. If requested by the Issuing Bank, the Company also shall submit a letter of credit application on the Issuing Bank's standard form in connection with any request for a Letter of Credit. A Letter of Credit shall be issued, amended, renewed or extended only if (and upon issuance, amendment, renewal or extension of each Letter of Credit the Company shall be deemed to represent and warrant that), after giving effect to such issuance, amendment, renewal or extension, (i) the LC Exposure will not exceed \$50,000,000, (ii) the portion of the LC Exposure attributable to Letters of Credit issued by any Issuing Bank will not exceed the LC Commitment of such Issuing Bank, (iii) the Revolving Exposure of any Lender will not exceed its Revolving Commitment and (iv) the Aggregate Revolving Exposure will not exceed the aggregate amount of the Revolving Commitments.

(c) Expiration Date. Each Letter of Credit shall expire at or prior to the close of business on the earlier of (i) the date one year after the date of the issuance of such Letter of Credit (or, in the case of any renewal or extension thereof, one year after such renewal or extension) and (ii) the date that is five Business Days prior to the Maturity Date; provided, that any Letter of Credit with a one-year tenor may provide for renewal thereof under procedures satisfactory to the applicable Issuing Bank for additional one-year periods (which shall in no event extend beyond the date referred to in clause (ii) above).

(d) Participations. By the issuance of a Letter of Credit (or an amendment to a Letter of Credit increasing the amount thereof) and without any further action on the part of the applicable Issuing Bank or the Revolving Lenders, the applicable Issuing Bank hereby grants to each Revolving Lender, and each Revolving Lender hereby acquires from such Issuing Bank, a participation in such Letter of Credit equal to such Revolving Lender's Applicable Percentage of the aggregate amount available to be drawn under such Letter of Credit. In consideration and in furtherance of the foregoing, each Revolving Lender hereby absolutely and unconditionally agrees to pay to the Administrative Agent, for the account of such Issuing Bank, in US Dollars such Lender's Applicable Percentage of each LC Disbursement made by the Issuing Bank and not reimbursed by the Company on the date due as provided in paragraph (e) of this Section or of any reimbursement payment required to be refunded to the Company for any reason. Each Revolving Lender acknowledges and agrees that its obligation to acquire participations pursuant to this paragraph in respect of Letters of Credit is absolute and unconditional and shall not be affected by any circumstance whatsoever, including any amendment, renewal or extension of any Letter of Credit, the occurrence and continuance of a Default, the reduction or termination of the Revolving Commitments or any *force majeure* or other event that under any rule of law or uniform practices to which any Letter of Credit is subject (including Section 3.14 of ISP 98 or any successor publication of the International Chamber of Commerce) permits a drawing to be made under such Letter of Credit after the expiration thereof or of the Revolving Commitments, and that each such payment shall be made without any offset, abatement, withholding or reduction whatsoever. Each Lender further acknowledges and agrees that, in issuing, amending, renewing or extending any Letter of Credit, the applicable Issuing Bank shall be entitled to rely, and shall not incur any liability for relying, upon the representation and warranty of the Company deemed made pursuant to Section 2.04(b) or 4.02.

(e) Reimbursement. If an Issuing Bank shall make any LC Disbursement in respect of a Letter of Credit, the Company shall reimburse such LC Disbursement by paying to the Issuing Bank in the currency of such LC Disbursement an amount equal to such LC Disbursement, not later than 1:00 p.m., New York City time, on the date that such LC Disbursement is made, if the Company shall have received notice of such LC Disbursement prior to 11:00 a.m., New York City time, on such date, or, if such notice has not been received by the Company prior to such time on such date, then not later than 1:00 p.m., New York City time, on (A) the Business Day that the Company receives such notice, if such notice is received prior to 11:00 a.m., New York City time, on the day of receipt or (B) the Business Day immediately following the day that the Company receives such notice, if such notice is not received prior to such time on the day of receipt. If the Company fails to make such payment when due then, upon notice from the Issuing Bank to the Company and the Administrative Agent, (i) if the applicable Letter of Credit is denominated in a Designated Foreign Currency, the Company's obligation to reimburse such LC Disbursement shall be converted into an obligation in US Dollars in such amount as the Administrative Agent shall determine would be required, based on current exchange rates, to enable it to purchase an amount of such Designated Foreign

Currency equal to the amount of such LC Disbursement and (ii) the Administrative Agent shall notify each Revolving Lender of the applicable LC Disbursement, the payment then due from the Company in respect thereof and such Revolving Lender's Applicable Percentage, thereof. Promptly following receipt of such notice, each Revolving Lender shall pay to the Administrative Agent in US Dollars its Applicable Percentage of the payment then due from the Company in the same manner as provided in Section 2.05 with respect to Loans made by such Revolving Lender (and Section 2.05 shall apply, mutatis mutandis, to the payment obligations of the Revolving Lenders), and the Administrative Agent shall promptly pay to the applicable Issuing Bank the amounts so received by it from the Revolving Lenders. Promptly following receipt by the Administrative Agent of any payment from the Company pursuant to this paragraph, the Administrative Agent shall distribute such payment to the Issuing Bank or, to the extent that Revolving Lenders have made payments pursuant to this paragraph to reimburse the Issuing Bank, then to such Revolving Lenders and the Issuing Bank as their interests may appear. Any payment made by a Revolving Lender pursuant to this paragraph to reimburse the Issuing Bank for any LC Disbursement shall not constitute a Loan and shall not relieve the Company of its obligation to reimburse such LC Disbursement.

(f) Obligations Absolute. The Company's obligations to reimburse LC Disbursements as provided in paragraph (e) of this Section shall be absolute, unconditional and irrevocable, and shall be performed strictly in accordance with the terms of this Agreement under any and all circumstances whatsoever and irrespective of (i) any lack of validity or enforceability of any Letter of Credit or this Agreement or any other Loan Document, or any term or provision herein or therein, (ii) any draft or other document presented under a Letter of Credit proving to be forged, fraudulent or invalid in any respect or any statement therein being untrue or inaccurate in any respect, (iii) payment by the Issuing Bank under a Letter of Credit against presentation of a draft or other document that does not comply with the terms of such Letter of Credit, (iv) any *force majeure* or other event that under any rule of law or uniform practices to which any Letter of Credit is subject (including Section 3.14 of ISP 98 or any successor publication of the International Chamber of Commerce) permits a drawing to be made under such Letter of Credit after the stated expiration date thereof or of the applicable Commitments or (v) any other event or circumstance whatsoever, whether or not similar to any of the foregoing, that might, but for the provisions of this Section, constitute a legal or equitable discharge of, or provide a right of setoff against, the Company's obligations hereunder. None of the Administrative Agent, the Revolving Lenders or any Issuing Bank, or any of their Related Parties, shall have any liability or responsibility by reason of or in connection with the issuance or transfer of any Letter of Credit or any payment or failure to make any payment thereunder (irrespective of any of the circumstances referred to in the preceding sentence), or any error, omission, interruption, loss or delay in transmission or delivery of any draft, notice or other communication under or relating to any Letter of Credit (including any document required to make a drawing thereunder), any error in interpretation of technical terms or any consequence arising from causes beyond the control of any Issuing Bank; provided that the foregoing shall not be construed to excuse an Issuing Bank from liability to the Company to the extent of any direct damages (as opposed to special, indirect, consequential or punitive damages, claims in respect of which are hereby waived by the Company to the extent permitted by applicable law)

suffered by the Company that are caused by the Issuing Bank's failure to exercise care when determining whether drafts and other documents presented under a Letter of Credit comply with the terms thereof. The parties hereto expressly agree that, in the absence of gross negligence or willful misconduct on the part of an Issuing Bank (as determined by a court of competent jurisdiction in a final and non-appealable judgment), such Issuing Bank shall be deemed to have exercised care in each such determination. In furtherance of the foregoing and without limiting the generality thereof, the parties agree that, with respect to documents presented which appear on their face to be in substantial compliance with the terms of a Letter of Credit, an Issuing Bank may, in its sole discretion, either accept and make payment upon such documents without responsibility for further investigation, regardless of any notice or information to the contrary, or refuse to accept and make payment upon such documents if such documents are not in strict compliance with the terms of such Letter of Credit.

(g) Disbursement Procedures. An Issuing Bank shall, promptly following its receipt thereof, examine all documents purporting to represent a demand for payment under a Letter of Credit. The Issuing Bank shall promptly notify the Administrative Agent and the Company by telephone (confirmed by facsimile or other electronic communication) of such demand for payment and whether the Issuing Bank has made or will make an LC Disbursement thereunder; provided that any failure to give or delay in giving such notice shall not relieve the Company of its obligation to reimburse the Issuing Bank and the Revolving Lenders with respect to any such LC Disbursement.

(h) Interim Interest. If an Issuing Bank shall make any LC Disbursement, then, unless the Company shall reimburse such LC Disbursement in full on the date such LC Disbursement is made, the unpaid amount thereof shall bear interest, for each day from and including the date such LC Disbursement is made to but excluding the date that the Company reimburses such LC Disbursement, at (i) in the case of an LC Disbursement denominated in US Dollars (including any LC Disbursement denominated in any Designated Foreign Currency that has been converted into an obligation in US Dollars as provided in paragraph (e) of this Section), the rate per annum then applicable to ABR Revolving Loans and (ii) in the case of an LC Disbursement denominated in any Designated Foreign Currency prior to such conversion into an obligation in US Dollars, the rate determined by the Issuing Bank to represent its cost of funds plus the Applicable Rate at the time in effect for LIBOR Borrowings or EURIBOR Borrowings; provided that, at all times after the Company fails to reimburse such LC Disbursement when due pursuant to paragraph (e) of this Section, Section 2.12(d) shall apply. Interest accrued pursuant to this paragraph shall be for the account of the applicable Issuing Bank, except that interest accrued on and after the date of payment by any Revolving Lender pursuant to paragraph (e) of this Section to reimburse the Issuing Bank shall be for the account of such Revolving Lender to the extent of such payment, and shall be payable on demand or, if no demand has been made, on the date on which the Company reimburses the applicable LC Disbursement in full.

(i) Replacement of Issuing Banks. An Issuing Bank may be replaced at any time by written agreement among the Company, the Administrative Agent, the replaced Issuing Bank and the successor Issuing Bank. The Administrative Agent shall

notify the Lenders of any such replacement of an Issuing Bank. At the time any such replacement shall become effective, the Company shall pay all unpaid fees accrued for the account of the replaced Issuing Bank pursuant to Section 2.11(b). From and after the effective date of any such replacement, (i) the successor Issuing Bank shall have all the rights and obligations of an Issuing Bank under this Agreement with respect to Letters of Credit to be issued thereafter and (ii) references herein to the term "Issuing Bank" shall be deemed to include such successor and any previous Issuing Bank, or such successor and all previous Issuing Banks, as the context shall require. After the replacement of an Issuing Bank hereunder, the replaced Issuing Bank shall remain a party hereto and shall continue to have all the rights and obligations of an Issuing Bank under this Agreement with respect to Letters of Credit issued by it prior to such replacement, but shall not be required to issue additional Letters of Credit.

(j) Cash Collateralization. If the Revolving Commitments shall be terminated, then on the Business Day that the Company receives notice from the Administrative Agent or the Required Lenders (or, if the maturity of the Loans has been accelerated, Revolving Lenders with LC Exposures representing greater than 50% of the total LC Exposure) demanding the deposit of cash collateral pursuant to this paragraph, the Company shall deposit in an account with the Administrative Agent, in the name of the Administrative Agent and for the benefit of the Revolving Lenders, an amount in cash equal to the LC Exposure as of such date plus any accrued and unpaid interest thereon; provided that the obligation to deposit such cash collateral shall become effective immediately, and such deposit shall become immediately due and payable, without demand presentment, protest or other notice of any kind, all of which are expressly waived by the Company, upon the occurrence of any Event of Default with respect to the Company described in clause (g) of Article VII. Such deposit shall be held by the Administrative Agent as collateral for the payment and performance of the obligations of the Company under this Agreement. The Administrative Agent shall have exclusive dominion and control, including the exclusive right of withdrawal, over such account. Other than any interest earned on the investment of such deposits, which investments shall be made at the option and sole discretion of the Administrative Agent and at the Company's risk and expense, such deposits shall not bear interest. Interest or profits, if any, on such investments shall accumulate in such account. Moneys in such account shall be applied by the Administrative Agent to reimburse the Issuing Banks for LC Disbursements for which they have not been reimbursed and, to the extent not so applied, shall be held for the satisfaction of the reimbursement obligations of the Company for the LC Exposure at such time or, if the maturity of the Loans has been accelerated (but subject to the consent of Revolving Lenders with LC Exposures representing greater than 50% of the total LC Exposure) be applied to satisfy other obligations of the Company under this Agreement. If the Company is required to provide an amount of cash collateral hereunder as a result of the occurrence of an Event of Default, such amount (to the extent not applied as aforesaid) shall be returned to it within three Business Days after all Events of Default have been cured or waived.

(k) Issuing Bank Reports. Unless otherwise agreed by the Administrative Agent, each Issuing Bank shall report in writing to the Administrative Agent (i) on or prior to each Business Day on which such Issuing Bank issues, amends, renews or

extends any Letter of Credit, the date of such issuance, amendment, renewal or extension, and the face amounts and currencies of the Letters of Credit issued, amended, renewed or extended by it and outstanding after giving effect to such issuance, amendment, renewal or extension (and whether the aggregate amount thereof shall have changed), it being understood that such Issuing Bank shall not effect any issuance, renewal, extension or amendment resulting in an increase in the aggregate amount of the Letters of Credit issued by it without first obtaining written confirmation from the Administrative Agent that such increase is then permitted under this Agreement, (ii) on each Business Day on which such Issuing Bank pays any draft drawn under a Letter of Credit, the amount paid by it, (iii) on any Business Day on which the Company fails to reimburse any LC Disbursement owed to such Issuing Bank on such day, the date of such failure and the amount of such LC Disbursement and (iv) on any Business Day, such other information as the Administrative Agent shall reasonably request as to the Letters of Credit issued by such Issuing Bank.

Section 2.05. Funding of Borrowings. (a) Each Lender shall make each Loan to be made by it hereunder on the proposed date thereof by wire transfer of immediately available funds in the applicable currency by 11:00 a.m., Local Time (or, in the case of an ABR Loan, such later time as shall be at least two hours after the applicable Borrowing Request shall have been delivered), to the account most recently designated by the Administrative Agent for such purpose for Loans of such Class and currency by notice to the applicable Lenders. The Administrative Agent will make such Loans available to the Company by promptly crediting the amounts so received, in like funds, to an account of the Company (i) in New York City or Boston, in the case of Loans denominated in US Dollars and (ii) in London, in the case of Loans denominated in Euro; provided that Revolving Loans made to finance the reimbursement of an LC Disbursement shall be remitted by the Administrative Agent to the applicable Issuing Bank.

(b) Unless the Administrative Agent shall have received notice from a Lender prior to the proposed date of any Borrowing that such Lender will not make available to the Administrative Agent such Lender's share of such Borrowing, the Administrative Agent may assume that such Lender has made such share available on such date in accordance with paragraph (a) of this Section and may, in reliance upon such assumption, make available to the Company a corresponding amount. In such event, if a Lender has not in fact made its share of the applicable Borrowing available to the Administrative Agent, then the applicable Lender and the Company severally agree to pay to the Administrative Agent forthwith on demand such corresponding amount with interest thereon, for each day from and including the date such amount is made available to the Company to but excluding the date of payment to the Administrative Agent, at (i) in the case of such Lender, the rate reasonably determined by the Administrative Agent to be the cost to it of funding such amount or (ii) in the case of the Company, the interest rate applicable to the subject Loan. If such Lender pays such amount to the Administrative Agent, then such amount shall constitute such Lender's Loan included in such Borrowing and the Administrative Agent shall return to the Company any amount (including interest) paid by the Company to the Administrative Agent pursuant to this paragraph.

Section 2.06. Repayment of Borrowings; Evidence of Debt. (a) The Company hereby unconditionally promises to pay to the Administrative Agent for the accounts of the applicable Lenders the then unpaid principal amount of each Revolving Borrowing and Term Loan of the Company on the Maturity Date.

(b) Each Lender shall maintain in accordance with its usual practice an account or accounts evidencing the indebtedness of the Company to such Lender resulting from each Loan made by such Lender, including the amounts of principal and interest payable and paid to such Lender from time to time hereunder.

(c) The Administrative Agent shall maintain accounts in which it shall record (i) the amount of each Loan made hereunder, the Class, Type and currency thereof and the Interest Period applicable thereto, (ii) the amount of any principal or interest due and payable or to become due and payable from the Company to each Lender hereunder and (iii) the amount of any sum received by the Administrative Agent hereunder for the accounts of the Lenders and each Lender's share thereof.

(d) The entries made in the accounts maintained pursuant to paragraph (b) or (c) of this Section shall be prima facie evidence of the existence and amounts of the obligations recorded therein; provided that the failure of any Lender or the Administrative Agent to maintain such accounts or any error therein shall not in any manner affect the obligation of the Company to repay the Loans in accordance with the terms of this Agreement.

(e) Any Lender may request that Loans of any Class made by it to the Company be evidenced by a promissory note, substantially in the form of Exhibit D hereto. In such event, the Company shall prepare, execute and deliver to such Lender a promissory note payable to such Lender (or, if requested by such Lender, to such Lender and its registered assigns) and in a form approved by the Administrative Agent. Thereafter, the Loans evidenced by each such promissory note and interest thereon shall at all times (including after assignment pursuant to Section 9.04) be represented by one or more promissory notes in such form payable to the payee named therein (or, if such promissory note is a registered note, to such payee and its registered assigns).

Section 2.07. Interest Elections. (a) Each Borrowing initially shall be of the Type specified in the applicable Borrowing Request and, in the case of a LIBOR Borrowing or EURIBOR Borrowing, shall have an initial Interest Period as specified in such Borrowing Request or as otherwise provided in Section 2.03. Thereafter, the Company may elect to convert such Borrowing to a different Type or to continue such Borrowing and, in the case of a LIBOR Borrowing or EURIBOR Borrowing, may elect Interest Periods therefor, all as provided in this Section and on terms consistent with the other provisions of this Agreement; provided that, for the avoidance of doubt, the Company may not convert a Borrowing denominated in US Dollars to a Borrowing denominated in Euro, or a Borrowing denominated in Euro to a Borrowing denominated in US Dollars. The Company may elect different options with respect to different portions of an affected Borrowing, in which case each such portion shall be allocated ratably among the Lenders holding the Loans comprising such Borrowing, and the Loans comprising each such portion shall be considered a separate Revolving Borrowing.

(b) To make an election pursuant to this Section, the Company shall notify the Administrative Agent of such election in writing, by facsimile or other electronic communication, or, except in the case of an election relating to a Borrowing denominated in Euro, by telephone by the time that a Borrowing Request would be required under Section 2.03 if the Company were requesting a Revolving Borrowing of the Type resulting from such election to be made on the effective date of such election. Each such Interest Election Request shall be irrevocable and, in the case of a telephonic request, shall be confirmed promptly by hand delivery, facsimile or other electronic communication to the Administrative Agent of a written Interest Election Request in a form approved by the Administrative Agent and signed by the Company. Notwithstanding any contrary provision herein, this Section shall not be construed to permit the Company to (i) change the currency of any Borrowing, (ii) elect an Interest Period for LIBOR Loans or EURIBOR Loans that does not comply with Section 2.02(d) or (iii) convert any Borrowing to a Borrowing of a Type not available under the Class of Commitments pursuant to which such Borrowing was made or for the currency of such Borrowing.

(c) Each Interest Election Request shall specify the following information in compliance with Section 2.02:

(i) the Borrowing to which such Interest Election Request applies and, if different options are being elected with respect to different portions thereof, the portions thereof to be allocated to each resulting Borrowing (in which case the information to be specified pursuant to clauses (iii) and (iv) below shall be specified for each resulting Borrowing);

(ii) the effective date of the election made pursuant to such Interest Election Request, which shall be a Business Day;

(iii) the Type of the resulting Borrowing; and

(iv) if the resulting Borrowing is to be a LIBOR Borrowing or EURIBOR Borrowing, the Interest Period to be applicable thereto after giving effect to such election, which shall be a period contemplated by the definition of the term "Interest Period".

If any such Interest Election Request requests a LIBOR Borrowing or EURIBOR Borrowing but does not specify an Interest Period, then the Company shall be deemed to have selected an Interest Period of one month's duration.

(d) Promptly following receipt of an Interest Election Request, the Administrative Agent shall advise each Lender holding a Loan to which such request relates of the details thereof and of such Lender's portion of each resulting Borrowing.

(e) If the Company fails to deliver a timely Interest Election Request with respect to a LIBOR Borrowing or EURIBOR Borrowing prior to the end of the Interest Period applicable thereto, then, unless such Borrowing is repaid as provided herein, at the end of such Interest Period, such Borrowing shall (i) in the case of a Borrowing denominated in US Dollars, be converted to an ABR Borrowing and (ii) in the case of a Revolving Borrowing denominated in Euro, become due and payable on the last day of such Interest Period.

Section 2.08. Termination and Reduction of Commitments. (a) The Term Commitment shall terminate upon the earlier of the borrowing of the Term Loans and 5:00 p.m., New York City time, on the Effective Date. Unless previously terminated, the Revolving Commitments shall terminate on the Maturity Date; provided that all Commitments shall terminate at 5:00 p.m., New York City time, on December 20, 2017, if the Effective Date shall not have occurred prior to such time.

(b) The Company may at any time terminate, or from time to time reduce, without premium or penalty, the Commitments of any Class; provided that (i) each reduction of the Commitments of any Class shall be in an amount that is an integral multiple of the Borrowing Multiple and not less than the Borrowing Minimum and (ii) the Company shall not terminate or reduce the Revolving Commitments if, after giving effect to any concurrent prepayment of the Revolving Loans in accordance with Section 2.10, the aggregate Revolving Exposures would exceed the aggregate Revolving Commitments.

(c) The Company shall notify the Administrative Agent of any election to terminate or reduce the Commitments of any Class under paragraph (b) of this Section at least three Business Days prior to the effective date of such termination or reduction, specifying the effective date of such election. Each notice delivered by the Company pursuant to this Section shall be irrevocable; provided that a notice of termination of the Commitments delivered by the Company may state that such notice is conditioned upon the effectiveness of other credit facilities, in which case such notice may be revoked by the Company (by notice to the Administrative Agent on or prior to the specified effective date) if such condition is not satisfied. Any termination or reduction of the Commitments of any Class shall be permanent. Each reduction of the Commitments of any Class shall be made ratably among the applicable Lenders in accordance with their respective Commitments of such Class.

Section 2.09. Incremental Commitments. (a) The Company may on one or more occasions, by written notice to the Administrative Agent (which shall promptly deliver a copy to each of the Lenders), request that (i) Incremental Revolving Commitments and/or (ii) Incremental Term Commitments be established, in each case in an amount not less than \$25,000,000; provided that the aggregate amount of all Incremental Commitments established hereunder during the term of this Agreement shall not exceed \$200,000,000. Such notice shall set forth (i) the amount of the Incremental Revolving Commitments or the Incremental Term Commitments, as applicable, being requested and (ii) the date on which such Incremental Revolving Commitments or Incremental Term Commitments, as applicable, are requested to become effective (which

shall be not fewer than 10 days or more than 30 days after the date of such notice or such other date as shall be mutually agreed by the Administrative Agent and the Company). Incremental Commitments may be provided by any Lender or by one or more banks or other financial institutions identified by the Company; provided that (A) any Lender approached to provide any Incremental Revolving Commitment or Incremental Term Commitment may elect or decline, in its sole discretion, to provide such Incremental Revolving Commitment or Incremental Term Commitment and (B) any Person that the Company proposes to become an Incremental Lender, if such Person is not already a Lender hereunder, shall be subject to the approval of the Administrative Agent and, in the case of any proposed Incremental Revolving Lender, each Issuing Bank (which approval shall not be unreasonably withheld). The Company and each Incremental Lender shall execute and deliver an Incremental Commitment Agreement and such other documentation as the Administrative Agent shall reasonably specify to evidence the Incremental Commitment of such Incremental Lender and/or its status as a Lender hereunder.

(b) The terms and conditions of any Incremental Revolving Commitment and loans and other extensions of credit to be made thereunder shall be identical to those of the Revolving Commitments and the Revolving Loans and other extensions of credit made thereunder, and shall be treated as a single Class with such Revolving Commitments and Revolving Loans. The terms and conditions of any Incremental Term Commitments and the Incremental Term Loans to be made thereunder shall be, except as otherwise set forth herein or in the applicable Incremental Commitment Agreement, identical to those of the Term Commitments and the Term Loans; provided that (i) the weighted average life to maturity of any Incremental Term Loans shall be no shorter than the remaining weighted average life to maturity of the Terms Loans and (ii) no Incremental Term Loan shall mature prior to the Maturity Date. Any Incremental Term Commitments established pursuant to an Incremental Commitment Agreement that have identical terms and conditions, and any Incremental Term Loans made thereunder, shall be designated as a separate series of Incremental Term Commitments and Incremental Term Loans for all purposes of this Agreement.

(c) On the effective date of any Incremental Revolving Commitments (the "Incremental Revolving Commitment Effective Date"), (i) the aggregate principal amount of the Revolving Loans outstanding (the "Initial Loans") immediately prior to giving effect to such Incremental Revolving Commitment Effective Date shall be deemed to be paid, (ii) each Incremental Revolving Lender that shall have been a Revolving Lender prior to the Incremental Revolving Commitment Effective Date shall pay to the Administrative Agent in same day funds an amount equal to the difference between (A) the product of (1) such Lender's Applicable Percentage (calculated after giving effect to the Incremental Revolving Commitments), multiplied by (2) the amount of the Subsequent Borrowings (as hereinafter defined) and (B) the product of (1) such Lender's Applicable Percentage (calculated without giving effect to the Incremental Revolving Commitments), multiplied by (2) the amount of the Initial Loans, (iii) each Incremental Revolving Lender that shall not have been a Revolving Lender prior to the Incremental Revolving Commitment Effective Date shall pay to the Administrative Agent in same day funds an amount equal to the product of (1) such Incremental Revolving Lender's

Applicable Percentage (calculated after giving effect to the Incremental Revolving Commitments) multiplied by (2) the amount of the Subsequent Borrowings, (iv) after the Administrative Agent receives the funds specified in clauses (ii) and (iii) above, the Administrative Agent shall pay to each Revolving Lender that is not an Incremental Revolving Lender the portion of such funds that is equal to the excess of (A) the product of (1) such Revolving Lender's Applicable Percentage (calculated without giving effect to the Incremental Revolving Commitments) multiplied by (2) the amount of the Initial Loans, over (B) the product of (1) such Revolving Lender's Applicable Percentage (calculated after giving effect to the Incremental Revolving Commitments) multiplied by (2) the amount of the Subsequent Borrowings, (v) after the effectiveness of the Incremental Revolving Commitments, the Company shall be deemed to have made new Borrowings (the "Subsequent Borrowings") in an aggregate principal amount equal to the aggregate principal amount of the Initial Loans and of the types and for the Interest Periods specified in a Borrowing Request delivered to the Administrative Agent in accordance with Section 2.03, (vi) each Revolving Lender shall be deemed to hold its Applicable Percentage of each Subsequent Borrowing (calculated after giving effect to the Incremental Revolving Commitments) and (vii) the Company shall pay each Revolving Lender any and all accrued but unpaid interest on the Initial Loans. The deemed payments made pursuant to clause (i) above in respect of each LIBOR Loan and EURIBOR Loan shall be subject to indemnification by the Company pursuant to the provisions of Section 2.15 if the Incremental Revolving Commitment Effective Date occurs other than on the last day of the Interest Period relating thereto and breakage costs result. In the case of any Incremental Revolving Commitments that have become effective at a time when Loans denominated in both Euro and US Dollars shall be outstanding, the amounts payable by the Revolving Lenders pursuant to this paragraph shall be paid in Euro and US Dollars in proportion to the principal amounts of the Euro and US Dollar denominated Revolving Loans outstanding on the Incremental Revolving Commitment Effective Date.

(d) Incremental Commitments established pursuant to this Section shall become effective on the date specified in the notice delivered by the Company pursuant to the second sentence of paragraph (a) above.

(e) Notwithstanding the foregoing, no Incremental Commitments shall become effective under this Section unless, (i) on the date of effectiveness thereof, the conditions set forth in paragraphs (a) and (b) of Section 4.02 shall be satisfied (without giving effect to the phrase "As of the date hereof," in Section 3.06 or 3.07(b)) and the Administrative Agent shall have received a certificate to that effect dated such date and executed by the chief financial officer of the Company and (ii) the Administrative Agent shall have received documents consistent with those delivered under clauses (b) and (c) of Section 4.01 as to the corporate power and authority of the Company to borrow hereunder after giving effect to such Incremental Commitment. Each Incremental Commitment Agreement may, without the consent of any Lender other than the applicable Incremental Lenders, effect, by amendment or amendment and restatement, such mechanical amendments (which shall not include amendments to or waivers under Articles V, VI or VII) to this Agreement and the other Loan Documents (including provisions hereof or thereof that would otherwise require the consent of all Lenders) as

may be necessary or appropriate, in the opinion of the Administrative Agent, to provide for the applicable Incremental Commitments and the loans and other extensions of credit thereunder and otherwise to give effect to the provisions of this Section, including any amendment necessary to treat the applicable Incremental Term Commitments and Incremental Term Loans as a new "Class" of commitments and loans hereunder; provided that no such Incremental Commitment Agreement shall effect any amendment or waiver referred to in Section 9.02(b)(2)(i), (ii) or (iii), or any other amendment or waiver that by the terms of this Agreement requires the consent of each Lender affected thereby (except to the extent each required consent shall have been obtained).

(f) Upon the effectiveness of an Incremental Commitment of any Incremental Lender, (i) such Incremental Lender shall be deemed to be a "Lender" (and a Lender in respect of Commitments and Loans of the applicable Class) hereunder, and henceforth shall be entitled to all the rights of and benefits accruing to, and bound by all agreements, acknowledgements and other obligations of, a Lender (or a Lender in respect of Commitments and Loans of the applicable Class) hereunder and under the other Loan Documents and (ii) in the case of any Incremental Revolving Commitment, (A) such Incremental Revolving Commitment shall constitute (or, in the event such Incremental Lender already has a Revolving Commitment, shall increase) the Revolving Commitment of such Incremental Lender and (B) the aggregate Revolving Commitment shall be increased by the amount of such Incremental Revolving Commitment, in each case, subject to further increase or reduction from time to time as set forth in the definition of the term "Revolving Commitment".

(g) Subject to the terms and conditions set forth herein and in the applicable Incremental Commitment Agreement, each Lender holding an Incremental Term Commitment shall make a loan to the Company in an amount equal to such Incremental Term Commitment on the date specified in such Incremental Commitment Agreement.

(h) The Administrative Agent shall notify the Lenders promptly upon receipt by the Administrative Agent of any notice from the Company referred to in Section 2.09(a) and of the effectiveness of any Incremental Commitments, in each case advising the Lenders of the details thereof (including each amendment effected pursuant to an Incremental Commitment Agreement) and, in the case of effectiveness of any Incremental Revolving Commitments, of the Applicable Percentages of the Revolving Lenders after giving effect thereto.

Section 2.10. Prepayment of Loans. (a) The Company shall have the right at any time and from time to time to prepay any Borrowing of the Company in whole or in part, subject to prior notice in accordance with paragraph (d) of this Section.

(b) If the aggregate Exposures of any Class shall exceed the aggregate Commitments of such Class, then (i) on the last day of any Interest Period for any LIBOR or EURIBOR Borrowing of such Class and (ii) on any other date in the event ABR Borrowings of such Class shall be outstanding, the Company shall prepay Loans of such Class in an amount equal to the lesser of (A) the amount necessary to eliminate such

excess (after giving effect to any other prepayment of Loans on such day) and (B) the amount of the applicable Borrowings referred to in clause (i) or (ii), as applicable. If, on the last Business Day of any calendar month, the aggregate amount of the Exposures of any Class shall exceed 105% of the aggregate Commitments of such Class, then the Company shall, not later than the next Business Day, prepay one or more Borrowings of such Class in an aggregate principal amount sufficient to eliminate such excess.

(c) Prior to any prepayment of Borrowings hereunder, the Company shall select the Borrowing or Borrowings to be prepaid and shall specify such selection in the notice of such prepayment pursuant to paragraph (d) of this Section.

(d) The Company shall notify the Administrative Agent in writing, by facsimile or other electronic communication, or, except in the case of a Borrowing denominated in Euro, by telephone (which must be confirmed by facsimile or other electronic communication) of any prepayment of a Borrowing hereunder not later than 11:00 a.m., Local Time, three Business Days before the date of such prepayment (to the extent practicable, in the case of a prepayment under paragraph (b) above). Each such notice shall be irrevocable and shall specify the prepayment date and the principal amount of each Borrowing or portion thereof to be prepaid; provided that, if a notice of prepayment is given in connection with a conditional notice of termination of the Commitments as contemplated by Section 2.08(c), then such notice of prepayment may be revoked if such notice of termination is revoked in accordance with Section 2.08(c). Promptly following receipt of any such notice, the Administrative Agent shall advise the applicable Lenders of the contents thereof. Each partial prepayment of any Borrowing shall be in an amount that would be permitted in the case of an advance of a Borrowing of the same Type as provided in Section 2.02. Each prepayment of a Borrowing shall be applied ratably to the Loans included in the prepaid Borrowing. Prepayments shall be accompanied by (i) accrued interest to the extent required by Section 2.12 and (ii) break funding payments pursuant to Section 2.15.

Section 2.11. Fees. (a) The Company agrees to pay to the Administrative Agent for the account of each Lender a facility fee, which shall accrue (i) with respect to Revolving Lenders, at the Applicable Rate with respect to the facility fee (A) on the daily amount of the Revolving Commitment of such Lender (whether used or unused) during the period from and including the date hereof to but excluding the date on which the last of such Revolving Commitments terminates and (B) after the Revolving Commitments terminate, on the daily amount of such Lender's Revolving Exposure to but excluding the date on which such Lender ceases to have any such Revolving Exposure and (ii) with respect to Term Lenders, at the Applicable Rate with respect to the facility fee on the daily amount of such Lender's Term Loan Exposure to but excluding the date on which such Lender ceases to have any Term Loan Exposure. Accrued facility fees shall be payable in arrears on the last day of March, June, September and December of each year, commencing on the first such date to occur after the date hereof, and on the date on which all the Commitments shall have terminated and the Lenders shall have no further Exposures. All facility fees shall be computed on the basis of a year of 360 days and shall be payable for the actual number of days elapsed (including the first day but excluding the last day).

(b) The Company agrees to pay (i) to the Administrative Agent for the account of each Revolving Lender a participation fee with respect to its participations in Letters of Credit, which shall accrue at the Applicable Rate used to determine the interest rate applicable to LIBOR Revolving Loans and EURIBOR Revolving Loans on the daily amount of such Revolving Lender's LC Exposure (excluding any portion thereof attributable to unreimbursed LC Disbursements) during the period from and including the date hereof to but excluding the later of the date on which such Revolving Lender's Revolving Commitment terminates and the date on which such Lender ceases to have any LC Exposure and (ii) to each Issuing Bank a fronting fee, which shall accrue at the rate of 0.125% per annum on the actual daily amounts of the LC Exposure attributable to Letters of Credit issued by it (excluding any portion thereof attributable to unreimbursed LC Disbursements) during the period from and including the date hereof to but excluding the later of the date of termination of the Revolving Commitments and the date on which there ceases to be any LC Exposure, as well as such Issuing Bank's standard fees with respect to the issuance, amendment, renewal or extension of any Letter of Credit or processing of drawings thereunder. Participation fees and fronting fees accrued under this paragraph through and including the last day of March, June, September and December of each year shall be payable on such last day, commencing on the first such date to occur after the date hereof; provided that all such fees shall be payable on the date on which the Revolving Commitments terminate and any such fees accruing after the date on which the Revolving Commitments terminate shall be payable on demand. Any other fees payable to the Issuing Banks pursuant to this paragraph shall be payable within 10 days after demand. All participation fees and fronting fees payable under this paragraph shall be computed on the basis of a year of 360 days and shall be payable for the actual number of days elapsed (including the first day but excluding the last day).

(c) The Company agrees to pay to the Administrative Agent, for its own account, fees payable in the amounts and at the times separately agreed upon between the Company and the Administrative Agent.

(d) All fees payable hereunder shall be paid on the dates due, in immediately available funds, to the Administrative Agent (or to each Issuing Bank, in the case of fees payable to it) for prompt distribution, in the case of facility fees and participation fees with respect to Letters of Credit, to the Lenders. Fees paid hereunder shall not be refundable.

Section 2.12. Interest. (a) The Loans comprising each ABR Borrowing shall bear interest at the Alternate Base Rate plus the Applicable Rate.

(b) The Loans comprising each LIBOR Borrowing shall bear interest at the Adjusted LIBO Rate for the Interest Period in effect for such Borrowing, plus the Applicable Rate.

(c) The Loans comprising each EURIBOR Borrowing shall bear interest at the EURIBO Rate for the Interest Period in effect for such Borrowing, plus the Applicable Rate.

(d) Notwithstanding the foregoing, if any principal of or interest on any Loan or any fee payable by the Company hereunder is not paid when due, whether at stated maturity, upon acceleration or otherwise, such overdue amount shall bear interest, after as well as before judgment, at a rate per annum equal to (i) in the case of overdue principal of any Loan, 2% per annum plus the rate otherwise applicable to such Loan as provided in the preceding paragraphs of this Section or (ii) in the case of any other amount, 2% per annum plus the rate applicable to ABR Revolving Loans as provided in paragraph (a) above.

(e) Accrued interest on each Loan shall be payable by the Company in arrears on each Interest Payment Date for such Loan; provided that (i) interest accrued pursuant to paragraph (d) above shall be payable on demand, (ii) in the event of any repayment or prepayment of any Loan (other than a prepayment of an ABR Revolving Loan prior to the end of the Revolving Availability Period), accrued interest on the principal amount repaid or prepaid shall be payable on the date of such repayment or prepayment and (iii) in the event of any conversion of any LIBOR Loan or EURIBOR Loan prior to the end of the current Interest Period therefor, accrued interest on such Loan shall be payable on the effective date of such conversion.

(f) All interest hereunder shall be computed on the basis of a year of 360 days, except that (i) interest on LC Disbursements denominated in Sterling and (ii) interest computed by reference to the Alternate Base Rate at times when the Alternate Base Rate is based on the Prime Rate shall be computed on the basis of a year of 365 days (or, except in the case of LC Disbursements denominated in Sterling, 366 days in a leap year), and in each case shall be payable for the actual number of days elapsed (including the first day but excluding the last day). The applicable Alternate Base Rate, Adjusted LIBO Rate or EURIBO Rate shall be determined by the Administrative Agent, and such determination shall be conclusive absent manifest error.

Section 2.13. Alternate Rate of Interest. (a) If prior to the commencement of any Interest Period for a LIBOR Borrowing or EURIBOR Borrowing, as applicable:

(i) the Administrative Agent determines (which determination shall be conclusive absent manifest error) that adequate means do not exist for ascertaining the Adjusted LIBO Rate or the EURIBO Rate, as the case may be, for such Interest Period; or

(ii) the Administrative Agent is advised by a majority in interest of the Lenders that would participate in such Borrowing that the Adjusted LIBO Rate or the EURIBO Rate, as the case may be, for such Interest Period will not adequately and fairly reflect the cost to such Lenders of making or maintaining their Loans included in such Borrowing for such Interest Period;

then the Administrative Agent shall give notice thereof to the Company and the applicable Lenders by telephone, facsimile or other electronic communication as promptly as practicable thereafter and, until the Administrative Agent notifies the

Company and the applicable Lenders that the circumstances giving rise to such notice no longer exist, (A) any Interest Election Request that requests the conversion of any Revolving Borrowing to, or continuation of any Revolving Borrowing as, a LIBOR Borrowing or EURIBOR Borrowing shall (1) if such Borrowing is denominated in US Dollars, be deemed a request for the conversion of such Borrowing to or the continuation of such Borrowing as an ABR Borrowing or (2) otherwise, be ineffective, and, in the case of this clause (2), the related Borrowing shall be repaid on the last day of the then current Interest Period applicable thereto and (B) any Borrowing Request for a LIBOR Borrowing or EURIBOR Borrowing shall be ineffective.

(b) If at any time the Administrative Agent determines (which determination shall be conclusive absent manifest error) that (i) the circumstances set forth in clause (a)(i) of this Section have arisen and such circumstances are unlikely to be temporary or (ii) the circumstances set forth in clause (a)(i) have not arisen but the supervisor for the administrator of the applicable Screen Rate or a Governmental Authority having jurisdiction over the Administrative Agent has made a public statement identifying a specific date after which the applicable Screen Rate shall no longer be used for determining interest rates for loans, then the Administrative Agent and the Company shall endeavor to establish an alternate rate of interest to that based on the applicable Screen Rate that gives due consideration to the then prevailing market convention for determining a rate of interest for syndicated loans of the applicable currency and Type at such time, and shall enter into an amendment to this Agreement to reflect such alternate rate of interest and such other related changes to this Agreement as the Administrative Agent and the Company may determine to be appropriate. Notwithstanding anything to the contrary in Section 9.02, such amendment shall become effective without any further action or consent of any other party to this Agreement so long as the Administrative Agent shall not have received, within five Business Days of the date notice of such alternate rate of interest is provided to the applicable Lenders, a written notice from a majority in interest of such Lenders stating that such Lenders object to such amendment. Until an alternate rate of interest shall be determined in accordance with this paragraph (b) (but, in the case of the circumstances described in clause (ii) of the first sentence of this paragraph (b), only to the extent the applicable Screen Rate is not available or published at such time on a current basis), clauses (A) and (B) of paragraph (a) of this Section shall be applicable. Notwithstanding the foregoing, if any alternate rate of interest established pursuant to this paragraph (b) (without giving effect to the Applicable Rate or any alternative spread that may have been agreed upon over the applicable Lenders' deemed cost of funds) shall be less than zero, such rate shall be deemed to be zero for the purposes of this Agreement.

Section 2.14. Increased Costs. (a) If any Change in Law shall:

(i) impose, modify or deem applicable any reserve, special deposit compulsory loan, insurance charge or similar requirement against assets of, deposits with or for the account of, or credit extended by, any Lender (except any such reserve to the extent reflected in the Adjusted LIBO Rate) or any Issuing Bank;

(ii) subject any Lender or Issuing Bank to any Taxes (other than Taxes on or with respect to payments by the Company hereunder, which shall be governed solely by Section 2.16, whether or not such Taxes are Excluded Taxes), assessments or other charges on its loans or commitments, or its deposits, reserves, other liabilities or capital attributable thereto; or

(iii) impose on any Lender or Issuing Bank or a Relevant Interbank Market any other condition affecting this Agreement or LIBOR or EURIBOR Loans made by such Lender or any Letter of Credit or participations therein;

and the result of any of the foregoing shall be to increase the cost to such Lender of making or maintaining any Loan (or of maintaining its obligation to make any such Loan) or to increase the cost to such Lender or Issuing Bank of participating in, issuing or maintaining any Letter of Credit or to reduce the amount of any sum received or receivable by such Lender or Issuing Bank hereunder (whether of principal, interest or otherwise), then the Company will pay to such Lender or Issuing Bank, as the case may be, such additional amount or amounts as will compensate such Lender or Issuing Bank for such additional costs incurred or reduction suffered.

(b) If any Lender or Issuing Bank reasonably determines that any Change in Law regarding capital or liquidity requirements has or would have the effect of reducing the rate of return on such Lender's or Issuing Bank's capital or on the capital of such Lender's or Issuing Bank's holding company, if any, as a consequence of this Agreement or the Loans made by, or participations in Letters of Credit held by, such Lender, or the Letters of Credit issued by such Issuing Bank, to a level below that which such Lender or Issuing Bank or such Lender's or Issuing Bank's holding company could have achieved but for such Change in Law (taking into consideration such Lender's or Issuing Bank's policies and the policies of such Lender's or Issuing Bank's holding company with respect to capital adequacy and liquidity), then from time to time the Company will pay to such Lender or Issuing Bank, as the case may be, such additional amount or amounts as will compensate such Lender or Issuing Bank or such Lender's or Issuing Bank's holding company for any such reduction suffered.

(c) A certificate of a Lender or Issuing Bank setting forth the amount or amounts necessary to compensate such Lender or Issuing Bank or such Lender's or Issuing Bank's holding company, as the case may be, as specified in paragraph (a) or (b) of this Section, and setting forth in reasonable detail the calculations used by such Lender or Issuing Bank to determine such amount, shall be delivered to the Company and shall be conclusive absent manifest error. The Company shall pay to such Lender or Issuing Bank, as the case may be, the amount shown as due on any such certificate within 15 Business Days after receipt thereof. Any additional interest owed pursuant to paragraph (b) above shall be determined by the relevant Lender, which determination shall be conclusive absent manifest error, and notified to the Company (with copies to the Administrative Agent) at least five Business Days before each date on which interest is payable for the relevant Loan, and such additional interest so notified to the Company by such Lender shall be payable to the Administrative Agent for the account of such Lender on each date on which interest is payable for such Loan.

(d) Failure or delay on the part of any Lender or Issuing Bank to demand compensation pursuant to this Section shall not constitute a waiver of such Lender's or Issuing Bank's right to demand such compensation; provided that the Company shall not be required to compensate a Lender or Issuing Bank pursuant to this Section for any increased costs or reductions incurred more than 180 days prior to the date that such Lender or Issuing Bank, as the case may be, notifies the Company of the Change in Law giving rise to such increased costs or reductions; provided further that, if the Change in Law giving rise to such increased costs or reductions is retroactive, then the 180 day period referred to above shall be extended to include the period of retroactive effect thereof.

Section 2.15. Break Funding Payments. In the event of (a) the payment (or deemed payment pursuant to Section 2.09) of any principal of any LIBOR Loan or EURIBOR Loan other than on the last day of an Interest Period applicable thereto (including as a result of an Event of Default), (b) the conversion of any LIBOR Loan or EURIBOR Loan to a Loan of a different Type or Interest Period other than on the last day of the Interest Period applicable thereto, (c) the failure to borrow, convert, continue or prepay any Loan on the date specified in any notice delivered pursuant hereto (regardless of whether such notice may be revoked under Section 2.10(d) and is revoked in accordance therewith) or (d) the assignment or deemed assignment of any LIBOR Loan or EURIBOR Loan other than on the last day of the Interest Period applicable thereto as a result of a request by the Company pursuant to Section 2.18, then, in any such event, the Company shall compensate each Lender for the loss, cost and expense attributable to such event. In the case of a LIBOR Loan or EURIBOR Loan, such loss, cost or expense to any Lender shall be deemed to include an amount determined by such Lender to be the excess, if any, of (i) the amount of interest that would have accrued on the principal amount of such Loan had such event not occurred, at the Adjusted LIBO Rate, LIBO Rate or EURIBO Rate, as the case may be, that would have been applicable to such Loan, for the period from the date of such event to the last day of the then current Interest Period therefor (or, in the case of a failure to borrow, convert or continue, for the period that would have been the Interest Period for such Loan), over (ii) the amount of interest that would accrue on such principal amount for such period at the interest rate such Lender would bid were it to bid, at the commencement of such period, for deposits in the applicable currency of a comparable amount and period from other banks in the London interbank market. A certificate of any Lender setting forth any amount or amounts that such Lender is entitled to receive pursuant to this Section, and setting forth in reasonable detail the calculations used by such Lender to determine such amount or amounts, shall be delivered to the Company and shall be conclusive absent manifest error. The Company shall pay such Lender the amount shown as due on any such certificate within 15 Business Days after receipt thereof.

Section 2.16. Taxes. (a) Any and all payments by or on account of the Company hereunder or under any other Loan Document shall be made free and clear of and without deduction for any Taxes, except to the extent required by law; provided that if the Company shall be required to deduct any Indemnified Taxes or Other Taxes from such payments, then (i) the sum payable shall be increased as necessary so that after making all required deductions (including deductions applicable to additional sums

payable under this Section) the Administrative Agent, the applicable Lender or Issuing Bank, as the case may be, receives an amount equal to the sum it would have received had no such deductions been made, (ii) the Company shall make such deductions and (iii) the Company shall pay the full amount deducted to the relevant Governmental Authority in accordance with applicable law.

(b) In addition, the Loan Parties shall pay any Other Taxes to the relevant Governmental Authority in accordance with applicable law; provided, however, that the Loan Parties shall not be required to pay any such Other Taxes (i) that are being contested in good faith by appropriate proceedings while the contest is being diligently conducted and (ii) for which adequate reserves are established in accordance with GAAP.

(c) The Company shall indemnify the Administrative Agent, each Lender and each Issuing Bank, within 15 Business Days after written demand therefor, for the full amount of any Indemnified Taxes or Other Taxes paid by the Administrative Agent, such Lender or Issuing Bank, as the case may be, on or with respect to any payment by or on account of any obligation of the Company hereunder or under any other Loan Document (including Indemnified Taxes or Other Taxes imposed or asserted on or attributable to amounts payable under this Section) and any penalties, interest and reasonable expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes or Other Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. A certificate as to the amount of such payment or liability setting forth in reasonable detail the circumstances giving rise thereto and the calculations used by such Lender to determine the amount thereof delivered to the Company by a Lender or Issuing Bank, or by the Administrative Agent, on its own behalf or on behalf of a Lender or Issuing Bank, shall be conclusive absent manifest error.

(d) As soon as practicable after any payment of Indemnified Taxes or Other Taxes by the Company to a Governmental Authority, the Company shall deliver to the Administrative Agent the original or a certified copy of a receipt issued by such Governmental Authority evidencing such payment, a copy of the return reporting such payment or other evidence of such payment reasonably satisfactory to the Administrative Agent.

(e) Each Lender shall severally indemnify the Administrative Agent for any Taxes (but, in the case of any Indemnified Taxes or Other Taxes, only to the extent that any Loan Party has not already indemnified the Administrative Agent for such Indemnified Taxes or Other Taxes and without limiting the obligation of the Loan Parties to do so) attributable to such Lender that are paid or payable by the Administrative Agent in connection with any Loan Document and any reasonable expenses arising therefrom or with respect thereto, whether or not such Taxes were correctly or legally imposed or asserted by the relevant Governmental Authority. The indemnity under this Section 2.16(e) shall be paid within 10 days after the Administrative Agent delivers to the applicable Lender a certificate stating the amount of Taxes so paid or payable by the Administrative Agent. Such certificate shall be conclusive of the amount so paid or payable absent manifest error.

(f) (i) Any Lender that is from time to time entitled to an exemption from, or reduction of, any applicable withholding Tax with respect to any payments under any Loan Document shall deliver to the Company and the Administrative Agent, at the time or times reasonably requested by the Company or the Administrative Agent, such properly completed and executed documentation reasonably requested by the Company or the Administrative Agent as will permit such payments to be made without, or at a reduced rate of, withholding. In addition, any Lender, if requested by the Company or the Administrative Agent, shall deliver such other documentation prescribed by law or reasonably requested by the Company or the Administrative Agent as will enable the Company or the Administrative Agent to determine whether or not such Lender is subject to any withholding (including backup withholding) or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in Sections 2.16(f)(ii)(a) through (e) below) shall not be required if in the Lender's judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender. Upon the reasonable request of such Company or the Administrative Agent, any Lender shall update any form or certification previously delivered pursuant to this Section 2.16(f). If any form or certification previously delivered pursuant to this Section expires or becomes obsolete or inaccurate in any respect with respect to a Lender, such Lender shall promptly (and in any event within 10 days after such expiration, obsolescence or inaccuracy) notify such Company and the Administrative Agent in writing of such expiration, obsolescence or inaccuracy and update the form or certification if it is legally eligible to do so.

(ii) Without limiting the generality of the foregoing, any Lender shall, if it is legally eligible to do so, deliver to the Company and the Administrative Agent (in such number of copies reasonably requested by the Company and the Administrative Agent) on or prior to the date on which such Lender becomes a party hereto, duly completed and executed copies of whichever of the following is applicable:

(a) in the case of a Lender that is a US Person, IRS Form W-9 certifying that such Lender is exempt from US Federal backup withholding tax;

(b) in the case of a Non-US Lender legally eligible to claim the benefits of an income tax treaty to which the United States is a party (1) with respect to payments of interest under any Loan Document, IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, establishing an exemption from, or reduction of, US Federal withholding Tax pursuant to the "interest" article of such tax treaty and (2) with respect to any other applicable payments under this Agreement, IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable, establishing an exemption from, or reduction of, US Federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(c) in the case of a Non-US Lender for whom payments under this Agreement constitute income that is effectively connected with such Lender's conduct of a trade or business in the United States, IRS Form W-8ECI;

(d) in the case of a Non-US Lender legally eligible to claim the benefits of the exemption for portfolio interest under Section 881(c) of the Code both (1) IRS Form W-8BEN or IRS Form W-8BEN-E, as applicable and (2) a certificate substantially in the form of Exhibit E (a "US Tax Certificate") to the effect that such Lender is not (a) a "bank" within the meaning of Section 881(c)(3)(A) of the Code, (b) a "10 percent shareholder" of the Company within the meaning of Section 881(c)(3)(B) of the Code (c) a "controlled foreign corporation" described in Section 881(c)(3)(C) of the Code and (d) conducting a trade or business in the United States with which the relevant interest payments are effectively connected;

(e) in the case of a Non-US Lender that is not the beneficial owner of payments made under this Agreement (including a partnership or a participating Lender) (1) an IRS Form W-8IMY on behalf of itself and (2) the relevant forms prescribed in clauses (a), (b), (c), (d) and (f) of this paragraph (f)(ii) that would be required of each such beneficial owner or partner of such partnership if such beneficial owner or partner were a Lender; provided, however, that if the Lender is a partnership and one or more of its partners are claiming the exemption for portfolio interest under Section 881(c) of the Code, such Lender may provide a US Tax Certificate on behalf of such partners; or

(f) any other form prescribed by law as a basis for claiming exemption from, or a reduction of, US Federal withholding Tax together with such supplementary documentation necessary to enable the Company or the Administrative Agent to determine the amount of Tax (if any) required by law to be withheld.

(iii) If a payment made to a Lender under any Loan Document would be subject to US Federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to the Withholding Agent, at the time or times prescribed by law and at such time or times reasonably requested by the Withholding Agent, such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by the Withholding Agent as may be necessary for the Withholding Agent to comply with its obligations under FATCA, to determine that such Lender has or has not complied with such Lender's obligations under FATCA and, as necessary, to determine the amount to deduct and withhold from such payment. Solely for purposes of this Section 2.16(f)(iii), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

(g) If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section 2.16 (including additional amounts paid pursuant to this Section 2.16), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including any Taxes) of such indemnified party and without interest (other than any interest paid by the relevant Governmental Authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid to such indemnifying party pursuant to the previous sentence (plus any penalties, interest or other charges imposed by the relevant Governmental Authority) in the event such indemnified party is required to repay such refund to such Governmental Authority. Notwithstanding anything to the contrary in this Section 2.16(g), in no event will any indemnified party be required to pay any amount to any indemnifying party pursuant to this Section 2.16(g) to the extent that such payment would place such indemnified party in a less favorable position (on a net after-Tax basis) than such indemnified party would have been in if the indemnification payments or additional amounts giving rise to such refund had never been paid. This Section 2.16(g) shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes which it deems confidential) to the indemnifying party or any other Person.

(h) Each party's obligations under this Section 2.16 shall survive the resignation or replacement of the Administrative Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Commitments and the repayment, satisfaction or discharge of all obligations under any Loan Document.

(i) For purposes of this Section 2.16, the term "Lender" includes any Issuing Bank and the term "applicable law" includes FATCA.

Section 2.17. Payments Generally; Pro Rata Treatment; Sharing of Setoffs. (a) The Company shall make each payment required to be made by it hereunder or under any other Loan Document (whether of principal, interest, fees or reimbursement of LC Disbursements, or of amounts payable under Section 2.14, 2.15 or 2.16, or otherwise) prior to the time expressly required hereunder (or, if no such time is expressly required, prior to 12:00 noon, Local Time) on the date when due, in immediately available funds, without setoff or counterclaim. Any amounts received after such time on any date may, in the discretion of the Administrative Agent, be deemed to have been received on the next succeeding Business Day for purposes of calculating interest thereon. All such payments shall be made to the Administrative Agent to the applicable account specified in Schedule 2.17 or, in any such case, to such other account as the Administrative Agent shall from time to time specify in a notice delivered to the Company; provided that payments to be made directly to an Issuing Bank as expressly provided herein and payments pursuant to Sections 2.14, 2.15, 2.16 and 9.03 shall be made directly to the Persons entitled thereto and payments pursuant to other Loan Documents shall be made to the Persons specified therein (it being agreed that the Company will be deemed to have satisfied their obligations with respect to payments referred to in this proviso if they shall make such payments to the persons entitled thereto

in accordance with instructions provided by the Administrative Agent; the Administrative Agent agrees to provide such instructions upon request, and the Company will not be deemed to have failed to make such a payment if it shall transfer such payment to an improper account or address as a result of the failure of the Administrative Agent to provide proper instructions). The Administrative Agent shall distribute any such payments received by it for the account of any Lender or other Person promptly following receipt thereof at the appropriate lending office or other address specified by such Lender or other Person. If any payment hereunder shall be due on a day that is not a Business Day, the date for payment shall be extended to the next succeeding Business Day, and, in the case of any payment accruing interest, interest thereon shall be payable for the period of such extension. All payments hereunder of principal or interest in respect of any Loan or LC Disbursement shall, except or otherwise expressly provided herein, be made in the currency of such Loan or LC Disbursement; all other payments hereunder and under each other Loan Document shall be made in US Dollars. Any payment required to be made by the Administrative Agent hereunder shall be deemed to have been made by the time required if the Administrative Agent shall, at or before such time, have taken the necessary steps to make such payment in accordance with the regulations or operating procedures of the clearing or settlement system used by the Administrative Agent to make such payment.

(b) If any Lender shall, by exercising any right of setoff or counterclaim or otherwise, obtain payment in respect of any principal of or interest on its Loans or participations in LC Disbursements resulting in such Lender receiving payment of a greater proportion of the aggregate amount of its Loans and participations in LC Disbursements and accrued interest thereon than the proportion received by any other Lender, then the Lender receiving such greater proportion shall purchase (for cash at face value) participations in the Loans and participations in LC Disbursements of other Lenders to the extent necessary so that the benefit of all such payments shall be shared by the Lenders ratably in accordance with the aggregate amount of their respective Loans and participations in LC Disbursements and accrued interest thereon; provided that (i) if any such participations are purchased and all or any portion of the payment giving rise thereto is recovered, such participations shall be rescinded and the purchase price restored to the extent of such recovery, without interest and (ii) the provisions of this paragraph shall not be construed to apply to any payment made by the Company pursuant to and in accordance with the express terms of this Agreement or any payment obtained by a Lender as consideration for the assignment of or sale of a participation in any of its Loans or participations in LC Disbursements to any assignee or participant, other than to the Company or any Subsidiary or Affiliate thereof (as to which the provisions of this paragraph shall apply). The Company consents to the foregoing and agrees, to the extent it may effectively do so under applicable law, that any Lender acquiring a participation pursuant to the foregoing arrangements may exercise against the Company rights of setoff and counterclaim with respect to such participation as fully as if such Lender were a direct creditor of the Company in the amount of such participation.

(c) Unless the Administrative Agent shall have received notice from the Company prior to the date on which any payment is due for the account of all or certain of the Lenders or Issuing Banks hereunder that the Company will not make such

payment, the Administrative Agent may assume that the Company has made such payment on such date in accordance herewith and may, in reliance upon such assumption, distribute to the applicable Lenders or Issuing Banks, as the case may be, the amount due. In such event, if the Company has not in fact made such payment, then each of the applicable Lenders or Issuing Banks, as the case may be, severally agrees to repay to the Administrative Agent forthwith on demand the amount so distributed to such Lender or Issuing Bank with interest thereon, for each day from and including the date such amount is distributed to it to but excluding the date of payment to the Administrative Agent, at a rate determined by the Administrative Agent in accordance with banking industry practices on interbank compensation.

(d) If any Lender shall fail to make any payment required to be made by it to the Administrative Agent pursuant to this Agreement, then the Administrative Agent may, in its discretion (notwithstanding any contrary provision hereof), apply any amounts thereafter received by them for the account of such Lender to satisfy such Lender's obligations to the Administrative Agent until all such unsatisfied obligations are fully paid.

Section 2.18. Mitigation Obligations; Replacement of Lenders. (a) If any Lender requests compensation under Section 2.14, or if the Company is required to pay any additional amount to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.16, then such Lender shall use reasonable efforts to designate a different lending office for funding or booking its Loans hereunder or to assign and delegate its rights and obligations hereunder to another of its offices, branches or Affiliates, if, in the judgment of such Lender, such designation or assignment and delegation (i) would eliminate or reduce amounts payable pursuant to Section 2.14 or 2.16, as the case may be, in the future and (ii) would not subject such Lender to any unreimbursed cost or expense and would not otherwise be disadvantageous to such Lender. The Company hereby agrees to pay all reasonable, direct, out-of-pocket costs and expenses incurred by any Lender in connection with any such designation or assignment and delegation.

(b) If (i) any Lender requests compensation under Section 2.14, (ii) any Loan Party is required to pay any additional amount to any Lender or any Governmental Authority for the account of any Lender pursuant to Section 2.16, (iii) any Lender fails to approve any matter requiring the approval of all Lenders or such Lender that has been approved by the Required Lenders or (iv) any Lender becomes a Defaulting Lender, then the Company may, at its sole expense and effort, upon notice to such Lender and the Administrative Agent, require such Lender to assign and delegate, without recourse (in accordance with and subject to the restrictions contained in Section 9.04), all its interests, rights and obligations under the Loan Documents to an assignee that shall assume such obligations (which assignee may be another Lender, if a Lender accepts such assignment); provided that (i) the Company shall have received the prior written consent of the Administrative Agent (and if a Revolving Commitment is being assigned, each Issuing Bank), which consent shall not be unreasonably withheld and (ii) such Lender shall have received payment of an amount equal to the outstanding principal of its Loans and participations in LC Disbursements, accrued interest thereon, accrued fees and all

other amounts payable to it hereunder, from the assignee or the Company. A Lender shall not be required to make any such assignment and delegation if, prior thereto, as a result of a waiver by such Lender or otherwise, the circumstances entitling the Company to require such assignment and delegation cease to apply. Each party hereto agrees that an assignment and delegation required pursuant to this paragraph may be effected pursuant to an Assignment and Assumption executed by the Company, the Administrative Agent and the assignee and that the Lender required to make such assignment and delegation need not be a party thereto.

Section 2.19. Defaulting Lenders. Notwithstanding any provision of this Agreement to the contrary, if any Revolving Lender becomes a Defaulting Lender, then the following provisions shall apply for so long as such Revolving Lender is a Defaulting Lender:

(a) the facility fee shall cease to accrue on the unused amount of the Revolving Commitment of such Defaulting Lender pursuant to Section 2.11(a);

(b) the Revolving Commitment and Revolving Exposure of such Defaulting Lender shall not be included in determining whether the Required Lenders or any other requisite Lenders have taken or may take any action hereunder or under any other Loan Document (including any consent to any amendment, waiver or other modification pursuant to Section 9.02); provided that any amendment, waiver or other modification requiring the consent of all Lenders or all Lenders affected thereby shall, except as otherwise provided in Section 9.02, require the consent of such Defaulting Lender in accordance with the terms hereof;

(c) if any LC Exposure exists at the time such Revolving Lender becomes a Defaulting Lender then:

(i) the LC Exposure of such Defaulting Lender shall be reallocated among the Non-Defaulting Lenders ratably in accordance with their respective Revolving Commitments but only to the extent that such reallocation does not result in the Revolving Exposure of any Non-Defaulting Lender exceeding such Non-Defaulting Lender's Revolving Commitment;

(ii) if the reallocation described in clause (i) above cannot, or can only partially, be effected, the Company shall within one Business Day following notice by the Administrative Agent, cash collateralize for the benefit of each Issuing Bank the portion of such Defaulting Lender's LC Exposure that has not been reallocated in accordance with the procedures set forth in Section 2.04(j) for so long as such LC Exposure is outstanding;

(iii) if the Company shall cash collateralize any portion of such Defaulting Lender's LC Exposure pursuant to clause (ii) above, the Company shall not be required to pay participation fees to such Defaulting Lender pursuant to Section 2.11(b) with respect to such portion of such Defaulting Lender's LC Exposure for so long as such Defaulting Lender's LC Exposure is cash collateralized;

(iv) if any portion of the LC Exposure of such Defaulting Lender is reallocated pursuant to clause (i) above, then the fees payable to the Lenders pursuant to Sections 2.11(a) and 2.11(b) shall be adjusted to give effect to such reallocation; and

(v) if all or any portion of such Defaulting Lender's LC Exposure is neither reallocated nor cash collateralized pursuant to clause (i) or (ii) above, then, as to such LC Exposure or portion thereof, without prejudice to any rights or remedies of any Issuing Bank or any other Lender hereunder, all facility fees that otherwise would have been payable pursuant to Section 2.11(a) to such Defaulting Lender and participation fees payable pursuant to Section 2.11(b) to such Defaulting Lender with respect to such Defaulting Lender's LC Exposure shall be payable to the Issuing Banks until and to the extent that such LC Exposure is reallocated and/or cash collateralized; and

(d) so long as such Revolving Lender is a Defaulting Lender, no Issuing Bank shall be required to issue, amend, renew or extend any Letter of Credit, unless, in each case, the related exposure and the Defaulting Lender's then outstanding LC Exposure will be fully covered by the Revolving Commitments of the Non-Defaulting Lenders and/or cash collateral provided by the Company in accordance with Section 2.19(c), and participating interests in any such issued, amended, reviewed or extended Letter of Credit will be allocated among the Non-Defaulting Lenders in a manner consistent with Section 2.19(c) (and such Defaulting Lender shall not participate therein).

(e) In the event that the Administrative Agent, the Company and each Issuing Bank agree that a Defaulting Lender has adequately remedied all matters that caused such Lender to be a Defaulting Lender, then the LC Exposure of the Revolving Lenders shall be readjusted to reflect the inclusion of such Lender's Revolving Commitment and on such date such Lender shall purchase at par such of the Revolving Loans of the other Revolving Lenders as the Administrative Agent shall determine may be necessary in order for such Revolving Lender to hold such Loans in accordance with its Applicable Percentage.

(f) The provisions of this Section 2.19 shall not impair any right, remedy or recourse that the Company may have against any Lender for breach of its obligations hereunder.

Section 2.20. Loan Modification Offers. (a) Without limiting the ability of the parties hereto to amend this Agreement as provided in Section 9.02, the Company may on one or more occasions, by written notice to the Administrative Agent, make one or more offers (each, a "Loan Modification Offer") to all the Lenders of one or more Classes (each Class subject to such a Loan Modification Offer, an "Affected Class") to make one or more Permitted Amendments pursuant to procedures reasonably specified by the Administrative Agent and reasonably acceptable to the Company. Such notice shall set forth (i) the terms and conditions of the requested Permitted Amendment and (ii) the date on which such Permitted Amendment is requested to become effective (which

shall not be less than 10 Business Days or more than 30 Business Days after the date of such notice, unless otherwise agreed to by the Administrative Agent). Permitted Amendments shall become effective only with respect to the Loans and Commitments of the Lenders of the Affected Class that accept the applicable Loan Modification Offer (such Lenders, the “Accepting Lenders”) and, in the case of any Accepting Lender, only with respect to such Lender’s Loans and Commitments of such Affected Class as to which such Lender’s acceptance has been made.

(b) A Permitted Amendment shall be effected pursuant to a Loan Modification Agreement executed and delivered by the Company, each applicable Accepting Lender and the Administrative Agent; provided that no Permitted Amendment shall become effective unless the Company shall have delivered to the Administrative Agent such legal opinions, board resolutions, secretary’s certificates, officer’s certificates and other documents as shall reasonably be requested by the Administrative Agent in connection therewith. The Administrative Agent shall promptly notify each Lender as to the effectiveness of each Loan Modification Agreement. Each Loan Modification Agreement may, without the consent of any Lender other than the applicable Accepting Lenders, effect such amendments to this Agreement and the other Loan Documents as may be necessary or appropriate, in the opinion of the Administrative Agent, to give effect to the provisions of this Section, including any amendments necessary to treat the applicable Loans and/or Commitments of the Accepting Lenders as a new “Class” of loans and/or commitments hereunder; provided that, in the case of any Loan Modification Offer relating to Revolving Commitments or Revolving Loans, except as otherwise agreed to by each Issuing Bank, (i) the allocation of the participation exposure with respect to any then-existing or subsequently issued or made Letter of Credit as between the commitments of such new “Class” and the remaining Revolving Commitments shall be made on a ratable basis as between the commitments of such new “Class” and the remaining Revolving Commitments and (ii) the Revolving Availability Period and the Maturity Date, as such terms are used in reference to Letters of Credit, may not be extended without the prior written consent of each Issuing Bank.

ARTICLE III

Representations and Warranties

The Company represents and warrants as follows:

Section 3.01. Corporate Existence and Standing. The Company and each Subsidiary is duly organized, validly existing and in good standing under the laws of its jurisdiction of incorporation, except for failures which, individually or in the aggregate, could not reasonably be expected to have a Material Adverse Effect or a material adverse effect on the rights or interests of the Lenders hereunder, and has all requisite authority to conduct its business in each jurisdiction in which the failure so to qualify could reasonably be expected to result in a Material Adverse Effect.

Section 3.02. Authorization; No Violation. The Transactions are within each Loan Party's corporate or partnership powers, have been duly authorized by all necessary corporate or partnership action and do not contravene (i) any Loan Party's charter, by-laws or other constitutive documents or (ii) any law or contractual restriction binding on or affecting any Loan Party, except for contraventions of contractual restrictions which individually or in the aggregate could not reasonably be expected to result in a Material Adverse Effect or a material adverse effect on the rights or interests of the Lender hereunder.

Section 3.03. Governmental Consents. No authorization or approval or other action by, and no notice to or filing with, any Governmental Authority or regulatory body is required for the due execution, delivery and performance by the Loan Parties of this Agreement or the other Loan Documents.

Section 3.04. Validity. This Agreement is, and the other Loan Documents when executed and delivered will be, the legal, valid and binding obligations of the Loan Parties party thereto, enforceable against such Loan Parties in accordance with their respective terms, subject to the effect of any applicable bankruptcy, insolvency, reorganization, moratorium or similar law affecting creditors' rights generally and to the effect of general principles of equity (regardless of whether such enforceability is considered in a proceeding in equity or at law).

Section 3.05. Use of Proceeds. The Company will use the proceeds of the Loans and the Letters of Credit only for the purposes specified in the preamble to this Agreement.

Section 3.06. Litigation. As of the date hereof, there is no pending or, to the best of the knowledge of the Company, threatened action or proceeding affecting the Company or any of its Subsidiaries before any court, Governmental Authority or arbitrator, which could reasonably be expected to result in a Material Adverse Effect, or which purports to affect the legality, validity or enforceability of this Agreement or any other Loan Document.

Section 3.07. Financial Statements; No Material Adverse Change. (a) The consolidated balance sheet of the Company and the Subsidiaries and the related consolidated statements of income, shareholders' equity and cash flows of the Company and the Subsidiaries (i) as at December 31, 2016, and for the year then ended, accompanied by the report of PricewaterhouseCoopers LLC and (ii) as at September 30, 2017, and for the portion of the fiscal year then ended, in each case as heretofore furnished to the Lenders, fairly present in all material respects the consolidated financial position of the Company and the Subsidiaries as at such dates and their consolidated results of operations, shareholders' equity and cash flows for the periods then ended in conformity with GAAP, subject, in the case of the financial statements referred to in the preceding clause (ii), to year-end audit adjustments and to the absence of certain notes.

(b) As of the date hereof, there has been, since December 31, 2016, no Material Adverse Effect.

Section 3.08. Investment Company Act. The Company is not an “investment company” or a company “controlled” by an “investment company” within the meaning of the Investment Company Act of 1940.

Section 3.09. Taxes. The Company and each Subsidiary has timely filed or caused to be filed all Tax returns and reports required to have been filed by it and has paid or caused to be paid all Taxes required to have been paid by it, except (a) Taxes that are being contested in good faith by appropriate proceedings and for which the Company or such Subsidiary, as applicable, has set aside on its books adequate reserves or (b) to the extent that the failure to do so could not reasonably be expected to result in a Material Adverse Effect.

Section 3.10. ERISA. (a) No ERISA Event has occurred or is reasonably expected to occur that, when taken together with all other such ERISA Events for which liability is reasonably expected to occur, could reasonably be expected to result in a Material Adverse Effect.

(b) The present value of all accumulated benefit obligations under each Plan (based on the assumptions used for purposes of Statement of Financial Accounting Standards No. 87, or any successor standard) did not, as of the date of the most recent financial statements reflecting such amounts, exceed the fair market value of the assets of such Plan by an amount that could reasonably be expected to result in a Material Adverse Effect, and the present value of all accumulated benefit obligations of all underfunded Plans (based on the assumptions used for purposes of Statement of Financial Accounting Standards No. 87) did not, as of the date of the most recent financial statements reflecting such amounts, exceed the fair market value of the assets of all such underfunded Plans by an amount that could reasonably be expected to result in a Material Adverse Effect.

Section 3.11. Regulation U. Neither the Company nor any of the Subsidiaries is engaged in the business of purchasing or carrying Margin Stock. The value of the Margin Stock owned directly or indirectly by the Company and the Subsidiaries which is subject to any arrangement hereunder described in the definition of “indirectly secured” in Section 221.2 of Regulation U issued by the Board represents less than 25% of the value of all assets of the Company and the Subsidiaries subject to such arrangement. For the purpose of making the calculation pursuant to the preceding sentence, to the extent consistent with Regulation U, treasury stock shall be deemed not to be an asset of the Company and its Subsidiaries.

Section 3.12. Environmental Matters. The operations of the Company and each Subsidiary comply in all material respects with all Environmental Laws, the noncompliance with which could reasonably be expected to result in a Material Adverse Effect.

Section 3.13. Disclosure. None of the Confidential Information Memorandum or any other information prepared and furnished by or on behalf of the Loan Parties to the Administrative Agent or any Lender in connection with the negotiation of this Agreement or delivered hereunder (as modified or supplemented by

other information so furnished) contains or will contain as of the date thereof (or, in the case of any such information that is not dated, the earliest date on which such information is furnished to the Administrative Agent or any Lender) any material misstatement of fact or omits or will omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that, with respect to projected financial information, the Company represents only that such information was prepared in good faith based upon assumptions believed to be reasonable at the time.

Section 3.14. Subsidiary Guarantors. The Subsidiary Guarantors include each Subsidiary of the Company other than Excluded Subsidiaries and newly-acquired or created Domestic Subsidiaries that are not yet required to have become Subsidiary Guarantors under the definition of "Guarantee Requirement".

Section 3.15. Anti-Corruption Laws and Sanctions. Anti-Corruption Laws and Sanctions. The Company has implemented and maintains in effect policies and procedures designed to ensure compliance by the Company, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions, and the Company, its Subsidiaries and their respective officers and employees and, to the knowledge of the Company, its directors and agents, are in compliance with Anti-Corruption Laws and applicable Sanctions in all material respects. None of (a) the Company, any Subsidiary or to the knowledge of the Company, any of their respective directors, officers or employees or (b) to the knowledge of the Company, any agent of the Company or any Subsidiary that will act in any capacity in connection with or benefit from the credit facility established hereby, is a Sanctioned Person.

Section 3.16. EEA Financial Institutions. Neither the Company nor any of the Subsidiaries is an EEA Financial Institution.

ARTICLE IV

Conditions

Section 4.01. Effective Date. The Commitments of the Lenders and the LC Commitments of the Issuing Banks under this Agreement shall become effective on the date on which each of the following conditions has been satisfied (or waived in accordance with Section 9.02):

(a) The Administrative Agent (or its counsel) shall have received from each party hereto either (i) a counterpart of this Agreement signed on behalf of such party or (ii) written evidence satisfactory to the Administrative Agent (which may include facsimile or other electronic transmission of a signed signature page of this Agreement) that such party has signed a counterpart of this Agreement.

(b) The Administrative Agent shall have received favorable written opinions (addressed to the Administrative Agent and the Lenders and dated the Effective Date) of each of (i) Morgan, Lewis & Bockius, LLP, counsel for the

Company, substantially in the form of Exhibit C-1 and (ii) the general counsel of the Company, substantially in the form of Exhibit C-2. Each Loan Party hereby requests such counsel to deliver such opinions.

(c) The Administrative Agent shall have received such documents and certificates as the Administrative Agent or its counsel may reasonably request relating to the formation, existence and good standing of the Loan Parties and the authorization of the Transactions, all in form and substance reasonably satisfactory to the Administrative Agent and its counsel.

(d) The Administrative Agent shall have received (i) a certificate, dated the Effective Date and signed by the chief financial officer of the Company, confirming that the conditions set forth in paragraphs (a) and (b) of Section 4.02 and in paragraph (f) of this Section have been satisfied.

(e) The Administrative Agent, the Arrangers and each Lender shall have received all fees and other amounts due and payable on or prior to the Effective Date, including, to the extent an invoice with respect thereto shall have been received by the Company, reimbursement or payment of all out-of-pocket expenses (including fees, charges and disbursements of counsel) required to be reimbursed or paid by the Company hereunder, under any other Loan Document, or under any commitment letter or fee letter entered into in connection with the credit facility established hereunder.

(f) The Guarantee Requirement shall be satisfied.

(g) The commitments under the Existing Credit Agreement shall have been or shall simultaneously with the effectiveness of this Agreement be terminated, all principal, interest, fees and other amounts outstanding, accrued or owed thereunder shall have been or shall be paid in full and all letters of credit issued thereunder shall have been terminated or cash collateralized in a manner satisfactory to the applicable Issuing Banks or shall be Existing Letters of Credit.

(h) The Lenders shall have received all documentation and other information required by bank regulatory authorities under applicable “know your customer” and anti-money laundering rules and regulations, including the USA PATRIOT Act.

The Administrative Agent shall notify the Company and the Lenders of the Effective Date, and such notice shall be conclusive and binding. Notwithstanding the foregoing, the obligations of the Lenders to make Loans and of the Issuing Banks to issue Letters of Credit hereunder shall not become effective unless each of the foregoing conditions shall be satisfied (or waived pursuant to Section 9.02) on or prior to December 20, 2017.

Section 4.02. Each Credit Event. The obligation of each Lender to make a Loan on the occasion of each Borrowing, and of each Issuing Bank to issue, amend, renew or extend any Letter of Credit, is subject to the satisfaction of the following conditions:

(a) The representations and warranties of the Loan Parties set forth in the Loan Documents shall be true and correct in all material respects on and as of the date of such Borrowing or the date of issuance, amendment, renewal or extension of such Letter of Credit, as applicable, other than any representation given as of a particular date, which representation shall be true and correct as of that date.

(b) At the time of and immediately after giving effect to such Borrowing or the issuance, amendment, renewal or extension of such Letter of Credit, as applicable, and the application of the proceeds thereof, no Default shall have occurred and be continuing.

Each Borrowing and each issuance, amendment, renewal or extension of a Letter of Credit shall be deemed to constitute a representation and warranty by the Company on the date thereof as to the matters specified in paragraphs (a) and (b) of this Section.

ARTICLE V

Affirmative Covenants

Until the Commitments have expired or terminated and the principal of and interest on each Loan and all fees payable hereunder have been paid in full and all Letters of Credit have expired or terminated and all LC Disbursements have been reimbursed, the Company covenants and agrees with the Lenders that it will:

Section 5.01. Payment of Taxes, Etc. Pay and discharge, and cause each Subsidiary to pay and discharge, before the same shall become delinquent, (i) all material taxes, assessments and governmental charges or levies imposed upon it or upon its income, profit or property and (ii) all material lawful claims which, if unpaid, might by law become a lien upon its property; provided, however, that neither the Company nor any Subsidiary shall be required to pay or discharge any such tax, assessment, charge or claim which is being contested in good faith and by proper proceedings and with respect to which the Company shall have established appropriate reserves in accordance with GAAP.

Section 5.02. Preservation of Existence, Etc. Preserve and maintain, and cause each Subsidiary to preserve and maintain, its legal existence and the rights, licenses, permits, privileges and franchises material to the conduct of its business, except to the extent that failures to keep in effect such rights, licenses, permits, privileges, franchises and, in the case of Subsidiaries only, legal existence could not, individually or in the aggregate, reasonably be expected to result in a Material Adverse Effect; provided that the foregoing shall not prohibit any merger, consolidation, liquidation or dissolution not prohibited under Section 6.04.

Section 5.03. Compliance with Laws, Etc. Comply, and cause each Subsidiary to comply, with the requirements of all applicable laws, rules, regulations and orders of any Governmental Authority (including, without limitation, all Environmental Laws), noncompliance with which could reasonably be expected to result in a Material Adverse Effect. The Company will maintain in effect and enforce policies and procedures designed to ensure compliance by the Company, its Subsidiaries and their respective directors, officers, employees and agents with Anti-Corruption Laws and applicable Sanctions.

Section 5.04. Keeping of Books. Keep, and cause each Subsidiary to keep, proper books of record and account in all material respects, in which full and correct entries shall be made of all financial transactions and the assets and business of the Company and each Subsidiary in accordance with GAAP consistently applied.

Section 5.05. Inspection. Permit, and cause each Subsidiary to permit, the Administrative Agent, and its representatives and agents, to inspect any of the properties, corporate books and financial records of the Company and its Subsidiaries, to examine and make copies of the books of account and other financial records of the Company and its Subsidiaries, and to discuss the affairs, finances and accounts of the Company and its Subsidiaries with, and to be advised as to the same by, their respective officers or directors, at such reasonable times and upon reasonable advance notice during normal business hours and intervals as the Administrative Agent may reasonably designate.

Section 5.06. Reporting Requirements. Furnish to the Administrative Agent for distribution to each Lender:

(a) As soon as available and in any event within 60 days after the end of each of the first three quarters of each fiscal year of the Company (or, if earlier, within 15 days after the date required to be filed with the Securities and Exchange Commission, without giving effect to any extension of the time for filing), a consolidated balance sheet of the Company and the consolidated Subsidiaries as of the end of such quarter and consolidated statements of income and changes in financial position (or consolidated statement of cash flow, as the case may be) of the Company and the consolidated Subsidiaries for the period commencing at the end of the previous fiscal year and ending with the end of such quarter, certified by the chief financial officer of the Company as presenting fairly, in all material respects, the consolidated financial position and the consolidated results of operations and cash flows of the Company and its consolidated Subsidiaries as of the end of and for such fiscal quarter and such portion of such fiscal year in accordance with GAAP;

(b) As soon as available and in any event within 105 days after the end of each fiscal year of the Company (or, if earlier, within 15 days after the date required to be filed with the Securities and Exchange Commission, without giving effect to any extension of the time for filing), an audited consolidated balance sheet of the Company and the consolidated Subsidiaries as of the end of such year and audited consolidated statements of income and stockholder's equity and

changes in financial position of the Company and the consolidated Subsidiaries for such fiscal year and accompanied by a report of PricewaterhouseCoopers LLC, independent registered public accounting firm of the Company, or other independent registered public accounting firm of nationally recognized standing, on the results of their examination of such consolidated annual financial statements of the Company and the consolidated Subsidiaries, which report shall be reported on without a “going concern” or like qualification or exception, or qualification arising out of the scope of the audit, or shall be otherwise reasonably acceptable to the Required Lenders;

(c) Promptly after the sending or filing thereof, copies of all financial information, reports and proxy materials the Company files with the Securities and Exchange Commission under the Securities Exchange Act of 1934, including, without limitation, all such reports that disclose material litigation pending against the Company or any Subsidiary or any material noncompliance with any Environmental Law on the part of the Company or any Subsidiary;

(d) Together with each delivery of financial statements pursuant to clause (a) or (b) above, a certificate signed by the chief financial officer of the Company (A) stating that no Default exists or, if any does exist, stating the nature and status thereof and describing the action the Company proposes to take with respect thereto, (B) demonstrating, in reasonable detail, the calculations used by such officer to determine compliance with the financial covenants contained in Sections 6.07 and 6.08 and (C) identifying the Subsidiaries, if any, that are “Excluded Subsidiaries” under clause (h) of the definition of such term;

(e) With respect to each fiscal year for which the Company shall have an aggregate Unfunded Liability of \$30,000,000 or more for all of its single employer Plans covered by Title IV of ERISA and all Multiemployer Plans covered by Title IV of ERISA to which the Company has an obligation to contribute, as soon as available, and in any event within 10 months after the end of such fiscal year, a statement of Unfunded Liabilities of each such Plan or Multiemployer Plan, certified as correct by an actuary enrolled in accordance with regulations under ERISA and a statement of estimated Withdrawal Liability as of the most recent plan year end as customarily prepared by the trustees under the Multiemployer Plans to which the Company has an obligation to contribute;

(f) As soon as possible, and in any event within 30 days after the occurrence of each event the Company knows is or may be a reportable event (as defined in Section 4043 of ERISA, but excluding any reportable event with respect to which the 30 day reporting requirement has been waived) with respect to any Plan or Multiemployer Plan with an Unfunded Liability in excess of \$30,000,000, a statement signed by the chief financial officer of the Company describing such reportable event and the action which the Company proposes to take with respect thereto;

(g) As soon as possible, and in any event within five Business Days after a Responsible Officer of the Company shall become aware of the occurrence of each Default, which Default is continuing on the date of such statement, a statement of the chief financial officer of the Company setting forth details of such Default or event and the action which the Company proposes to take with respect thereto;

(h) From time to time, such other information as to the business and financial condition of the Company and the Subsidiaries and their compliance with the Loan Documents as the Administrative Agent, or any Lender through the Administrative Agent, may reasonably request; and

(i) Promptly following a request therefor, all documentation and other information that a Lender reasonably requests in order to comply with its ongoing obligations under applicable “know your customer” and anti-money laundering rules and regulations, including the USA PATRIOT Act.

Information required to be delivered to the Administrative Agent for distribution to the Lenders pursuant to this Section shall be deemed to have been so delivered or distributed, as the case may be, (i) on the date on which such information, or one or more annual or quarterly reports containing such information, shall have been delivered to the Administrative Agent and posted by the Administrative Agent on an IntraLinks or similar website to which the Lenders have been granted access or (ii) in the case of information referred to in paragraphs (a), (b) and (c) of this Section, on the date on which the Company provides notice to the Administrative Agent that such information is available (A) on the website of the Securities and Exchange Commission at <http://www.sec.gov> or (B) on the Company’s website at <http://www.waters.com>. Information required to be delivered pursuant to this Section may also be delivered by electronic communications pursuant to procedures approved by the Administrative Agent.

Section 5.07. Use of Proceeds and Letters of Credit. Use the proceeds of Borrowings hereunder and the Letters of Credit for the purposes referred to in the recitals to this Agreement, and not for any purpose that would entail a violation of any applicable law or regulation (including, without limitation, Regulations U and X of the Board). No part of the proceeds of any Borrowing and no Letter of Credit shall be used by the Company or any Subsidiary (A) for the purpose of furthering an offer, payment, promise to pay, or authorization of the payment or giving of money, or anything else of value, to any Person in violation of any Anti-Corruption Laws or (B) for the purpose of funding, financing or facilitating any activities, businesses or transactions of or with any Sanctioned Person, or in any Sanctioned Country, to the extent such activities, businesses or transactions would be prohibited by Sanctions if conducted by a corporation incorporated in the United States.

Section 5.08. Guarantee Requirement. Cause the Guarantee Requirement to be satisfied at all times.

ARTICLE VI

Negative Covenants

Until the Commitments have expired or terminated and the principal of and interest on each Loan and all fees payable hereunder have been paid in full and all Letters of Credit have expired or terminated and all LC Disbursements have been reimbursed, the Company covenants and agrees with the Lenders that it will not:

Section 6.01. Subsidiary Debt. Permit any Subsidiary that is not a Subsidiary Guarantor to create, incur, assume or permit to exist any Debt, except:

(a) Debt created hereunder;

(b) Debt to the Company or any other Subsidiary; and

(c) other Debt; provided that the sum of (without duplication) (i) the principal amount of all Debt permitted by this clause (c), (ii) the principal amount of all Debt secured by Liens permitted by Section 6.02 and (iii) all Attributable Debt in respect of Sale and Leaseback Transactions (other than Sale and Leaseback Transactions entered into at the time the property subject thereto is acquired or within 90 days thereafter) permitted by Section 6.03 does not at any time exceed the greater of \$180,000,000 or 15% of Consolidated Net Tangible Assets.

Section 6.02. Liens Securing Debt. Create, incur, assume or permit to exist, or permit any Subsidiary to create, incur, assume or permit to exist, any Lien on any property or asset now owned or hereafter acquired by it securing Debt unless, after giving effect thereto, the sum of (without duplication) (i) all Debt secured by all such Liens, (ii) the principal amount of all Debt of Subsidiaries that are not Subsidiary Guarantors permitted by Section 6.01(c) and (iii) all Attributable Debt in respect of Sale and Leaseback Transactions (other than Sale and Leaseback Transactions entered into at the time the property subject thereto is acquired or within 90 days thereafter) permitted by Section 6.03 does not at any time exceed the greater of \$180,000,000 or 15% of Consolidated Net Tangible Assets. For the purpose of this Section 6.02, Treasury Stock to the extent constituting Margin Stock shall be deemed not to be an asset of the Company and its Subsidiaries.

Section 6.03. Sale and Leaseback Transactions. Enter into or be party to, or permit any Subsidiary to enter into or be party to, any Sale and Leaseback Transaction (other than any Sale and Leaseback Transaction entered into at the time the property subject thereto is acquired or within 90 days thereafter) unless after giving effect thereto the sum of (without duplication) (i) all Attributable Debt permitted by this Section, (ii) the principal amount of all Debt of Subsidiaries that are not Subsidiary Guarantors permitted by Section 6.01(c) and (iii) the principal amount of all Debt secured by Liens permitted by Section 6.02(i) does not exceed the greater of \$180,000,000 or 15% of Consolidated Net Tangible Assets.

Section 6.04. Merger, Consolidation, Etc. (a) In the case of the Company, merge or consolidate with or into, or transfer or permit the transfer of all or substantially all its consolidated assets to, any Person (including by means of one or more mergers or consolidations of or transfers of assets by Subsidiaries), except that the Company may merge or consolidate with any US Corporation if (i) the Company shall be the surviving corporation in such merger or consolidation, (ii) immediately after giving effect thereto no Default shall have occurred and be continuing and (iii) the Company shall be in compliance with the covenants set forth in Sections 6.07 and 6.08 as of and for the most recently ended period of four fiscal quarters for which financial statements shall have been delivered pursuant to Section 5.06, giving pro forma effect to such merger or consolidation and any related incurrence or repayment of Debt as if they had occurred at the beginning of such period, and the Administrative Agent shall have received a certificate of the chief financial officer of the Company setting forth computations demonstrating such compliance.

(b) In the case of any Material Subsidiary, merge or consolidate with or into, or transfer all or substantially all its assets to, any Person, except that (i) any Material Subsidiary may merge into or transfer all or substantially all its assets to the Company, (ii) any Material Subsidiary may merge or consolidate with or transfer all or substantially all its assets to any Subsidiary; provided that if either constituent corporation in such merger or consolidation, or the transferor of such assets, shall be a Subsidiary Guarantor, then the surviving or resulting corporation or the transferee of such assets, as the case may be, must be or at the time of such transaction become a Subsidiary Guarantor and (iii) so long as, at the time of and immediately after giving effect to such transaction, no Default shall have occurred and be continuing, any Material Subsidiary may merge or consolidate with or transfer all or substantially all its assets to any Person other than the Company or a Subsidiary so long as such transaction would not be prohibited by paragraph (a) above. Notwithstanding the foregoing, nothing in this paragraph shall (A) so long as, at the time of and immediately after giving effect to such transaction, no Event of Default shall have occurred and be continuing, prohibit the Company or any Subsidiary from (1) transferring any assets of such Person to acquire Foreign Subsidiaries, (2) making capital or working capital contributions to Foreign Subsidiaries in the ordinary course of business or (3) selling or otherwise disposing of assets to a Foreign Subsidiary on arm's-length terms (as determined in good faith by the Company or the applicable Subsidiary) or (B) require any Foreign Subsidiary to become a Subsidiary Guarantor hereunder.

(c) In the case of the Company, permit any Domestic Subsidiary to become a subsidiary of a Foreign Subsidiary; provided that nothing in this paragraph shall prevent the Company from acquiring, directly or indirectly, any Person that at the time of and immediately after giving effect to such acquisition would constitute a Foreign Subsidiary and would own any Domestic Subsidiary not acquired by it in contemplation of such acquisition; provided further that nothing in this paragraph shall prevent Subsidiaries, if any, that are "Excluded Subsidiaries" under clause (c) of the definition of such term from becoming subsidiaries of Foreign Subsidiaries.

For purposes of this Section 6.04, Treasury Stock to the extent constituting Margin Stock shall be deemed not to be an asset of the Company.

Section 6.05. Change in Business. Fail to be engaged in the business conducted by the Company and the Subsidiaries on the date hereof to an extent such that the character of the business conducted by the Company and the Subsidiaries on the date hereof, taken as a whole, shall be materially changed.

Section 6.06. Certain Restrictive Agreements. Enter into, or permit any Subsidiary to enter into, any contract or other agreement that would limit the ability of any Subsidiary to pay dividends or make loans or advances to, or to repay loans or advances from, the Company or any other Subsidiary, other than (i) customary non-assignment provisions in any lease or sale agreement relating to the assets that are the subject of such lease or sale agreement, (ii) any restriction binding on a Person acquired by the Company at the time of such acquisition, which restriction is applicable solely to the Person so acquired and its subsidiaries and was not entered into in contemplation of such acquisition, (iii) in connection with any secured Debt permitted under Section 6.02, customary restrictions on the transfer of the collateral securing such Debt and (iv) customary restrictions agreed to by any Subsidiary in connection with any Debt of such Subsidiary permitted under Section 6.01.

Section 6.07. Leverage Ratio. Permit the Leverage Ratio as of the end of any fiscal quarter to exceed 3.50:1.00; provided that, following the completion of a Material Acquisition that, on a pro forma basis, giving effect to any related incurrence or repayment of Debt, would result in an increase in the Company's Leverage Ratio, if the Company shall so elect by a notice delivered to the Administrative Agent within 30 days following the completion of such Material Acquisition (a "Leverage Ratio Increase Election"), such maximum Leverage Ratio shall be increased to 4.00:1.00 at the end of and for the fiscal quarter during which such Material Acquisition shall have been completed and at the end of and for each of the following three consecutive fiscal quarters (the period during which any such increase in the Leverage Ratio shall be in effect being called a "Leverage Ratio Increase Period"). The Company may terminate any Leverage Ratio Increase Period by a notice delivered to the Administrative Agent, whereupon, on the last day of the fiscal quarter during which such notice is given and on the last day of each fiscal quarter thereafter until another Leverage Ratio Increase Period has commenced as provided in this Section, the maximum Leverage Ratio shall be 3.50:1.00. If a Leverage Ratio Increase Election shall have been made under this Section, the Company may not make another Leverage Ratio Increase Election unless, following the termination or expiration of the most recent prior Leverage Ratio Increase Period, the Leverage Ratio as of the last day of at least two consecutive full fiscal quarters of the Company shall not have exceeded 3.50:1.00. Notwithstanding the foregoing, the Company shall not be permitted to make more than two Leverage Ratio Increase Elections during the term of this Agreement.

Section 6.08. Interest Coverage Ratio. Permit the Interest Coverage Ratio as of the end of any fiscal quarter for the period of four consecutive fiscal quarters then ended to be less than 3.50:1.00.

ARTICLE VII

Events of Default

If any of the following events ("Events of Default") shall occur and be continuing:

(a) The Company shall fail to pay (i) any amount of principal of any Loan or any reimbursement obligation in respect of any LC Disbursement when due hereunder, or (ii) any interest, fee or other amount due hereunder and such default shall continue for five days; or

(b) Any representation or warranty made or deemed made by the Company or any other Loan Party (or any of their respective officers) in connection with this Agreement or any other Loan Document shall prove to have been incorrect in any material respect when made or deemed made; provided, however, that no Event of Default shall be deemed to exist by reason of the incorrectness of any representation or warranty after such incorrectness shall have been cured (other than by disclosure, which shall not be deemed to cure any breach of a representation or warranty); or

(c) The Company shall fail to maintain its corporate, limited liability company or partnership existence as required by Section 5.02, or the Company shall fail for five Business Days to comply with Section 5.06(g), or the Company or any Subsidiary shall fail to perform or observe any term, covenant or agreement contained in Section 5.07 or Article VI of this Agreement on its part to be performed or observed; or

(d) The Company or any Subsidiary shall fail to perform or observe any other term, covenant or agreement contained in this Agreement or any other Loan Document on its part to be performed or observed (other than those failures or breaches referred to in paragraphs (a), (b) and (c) above) and any such failure shall remain unremedied for 30 days after written notice thereof has been given to the Company by the Administrative Agent or the Required Lenders; or

(e) The Company or any Subsidiary shall fail to pay any amount of principal of, interest on or premium with respect to, Material Debt (other than the Loans) when due (whether at scheduled maturity or by required prepayment, acceleration, demand or otherwise) and such failure shall continue beyond the applicable grace period, if any, specified in the agreement or instrument governing such Debt, or any other event shall occur or condition shall exist with respect to Material Debt (other than the Loans) of the Company or such Subsidiary if the effect of such other event or condition is to cause, or to permit the holder or holders of such debt (or any trustee or agent on their behalf) to cause, such Material Debt to become due, or to require such Material Debt to be prepaid or repurchased, prior to the stated maturity thereof; or

(f) The Company or any Subsidiary shall generally not pay its debts as such debts become due, or shall admit in writing its inability to pay its debts generally; or

(g) The Company or any Subsidiary shall make a general assignment for the benefit of creditors; or any proceeding shall be instituted by or against the Company or such Subsidiary seeking to adjudicate it a bankrupt or insolvent, or seeking liquidation, winding up, reorganization, arrangement, adjustment, protection, relief or composition of it or its debt under any law relating to bankruptcy, insolvency or reorganization or relief of debtors, or seeking the entry of an order for relief or the appointment of a receiver, trustee or other similar official for it or for any substantial part of its property; or the Company or any such Subsidiary shall take corporate action to authorize any of the actions set forth above in this paragraph (g); provided that, in the case of any such proceeding filed or commenced against the Company or any Subsidiary, such event shall not constitute an "Event of Default" hereunder unless either (i) the same shall have remained undismissed or unstayed for a period of 60 days, (ii) an order for relief shall have been entered against the Company or such Subsidiary under the federal bankruptcy laws as now or hereafter in effect or (iii) the Company or such Subsidiary shall have taken corporate action consenting to, approving or acquiescing in the commencement or maintenance of such proceeding; or

(h) Any judgment or judgments for the payment of money in excess of \$30,000,000 in the aggregate for all such judgments shall be rendered against the Company or one or more Subsidiaries and (i) enforcement proceedings shall have been commenced by any creditor upon such judgments or (ii) there shall be any period of 10 consecutive days during which stays of enforcement of such judgments, by reason of pending appeals or otherwise, shall not be in effect; or

(i) Either (i) the PBGC shall terminate any single-employer Plan (as defined in Section 4001(b)(2) of ERISA) that provides benefits for employees of the Company or any Subsidiary and such plan shall have an Unfunded Liability in an amount in excess of \$30,000,000 at such time or (ii) Withdrawal Liability shall be assessed against the Company or any Subsidiary in connection with any Multiemployer Plan (whether under Section 4203 or Section 4205 of ERISA) and such Withdrawal Liability shall be an amount in excess of \$30,000,000; or

(j) the guarantee of any Subsidiary Guarantor under the Subsidiary Guarantee Agreement or the Obligations of the Loan Parties under any Loan Document shall not be (or shall be asserted by the Company or any Subsidiary Guarantor not to be) valid or in full force and effect; or

(k) a Change of Control shall have occurred.

then, and in any such event, the Administrative Agent shall at the request, or may with the consent, of the Required Lenders, by notice to the Company, (i) declare the obligation of each Lender to make Loans and of each Issuing Bank to issue Letters of Credit hereunder to be terminated, whereupon the same shall forthwith terminate and/or (ii) declare the Loans, all interest accrued and unpaid thereon and all other amounts outstanding or accrued under this Agreement to be forthwith due and payable, whereupon the Loans, all such accrued interest and all such amounts shall become and be forthwith due and payable, without presentment, demand, protest or further notice of any kind, all

of which are hereby expressly waived by the Company. In the event of the occurrence of an Event of Default under clause (g) of this Article VII, (A) the obligation of each Lender to make Loans and of each Issuing Bank to issue Letters of Credit hereunder shall automatically be terminated and (B) the Loans, all interest accrued and unpaid thereon and all other amounts outstanding or accrued under this Agreement shall automatically become and be due and payable, without presentment, demand, protest or any notice of any kind, all of which are hereby expressly waived by the Company.

ARTICLE VIII

The Administrative Agent

In order to expedite the transactions contemplated by this Agreement, JPMCB is hereby appointed to act as Administrative Agent under the Loan Documents on behalf of the Lenders and the Issuing Banks. Each of the Lenders, each assignee of any Lender and each Issuing Bank hereby irrevocably authorizes the Administrative Agent to take such actions on their behalf and to exercise such powers as are delegated to the Administrative Agent by the terms of the Loan Documents, together with such actions and powers as are reasonably incidental thereto. The Administrative Agent is hereby expressly authorized by the Lenders and the Issuing Banks, without hereby limiting any implied authority, (a) to receive on behalf of the Lenders and the Issuing Banks all payments of principal of and interest on the Loans and all other amounts due to the Lenders or the Issuing Banks hereunder, and promptly to distribute to each Lender or Issuing Bank its proper share of each payment so received; (b) to give notice on behalf of each of the Lenders to the Company of any Event of Default of which the Administrative Agent has actual knowledge acquired in connection with its agency hereunder; and (c) to distribute to each Lender copies of all notices, financial statements and other materials delivered by the Company or any other Loan Party pursuant to this Agreement or the other Loan Documents as received by the Administrative Agent.

With respect to the Loans made by it hereunder, the Administrative Agent in its individual capacity and not as Administrative Agent shall have the same rights and powers as any other Lender and may exercise the same as though it were not the Administrative Agent, and the Administrative Agent and its Affiliates may accept deposits from, lend money to, act as the financial advisor or in any other advisory capacity for and generally engage in any kind of business with the Company or any Subsidiary or other Affiliate thereof as if it were not the Administrative Agent hereunder and without any duty to account therefor to the Lenders or Issuing Banks.

The Administrative Agent shall not have any duties or obligations except those expressly set forth in the Loan Documents. Without limiting the generality of the foregoing, (a) the Administrative Agent shall not be subject to any fiduciary or other implied duties, regardless of whether a Default has occurred and is continuing, (b) the Administrative Agent shall not have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated by the Loan Documents that the Administrative Agent is required to exercise as directed

upon receipt of notice in writing by the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, or as the Administrative Agent shall believe in good faith to be necessary, under the circumstances as provided in the Loan Documents), provided that the Administrative Agent shall not be required to take any action that, in its opinion, could expose the Administrative Agent to liability or be contrary to any Loan Document or applicable law, rule or regulation and (c) except as expressly set forth in the Loan Documents, the Administrative Agent shall not have any duty to disclose, and the Administrative Agent shall not be liable for the failure to disclose, any information relating to the Company or any of its Subsidiaries or other Affiliates thereof that is communicated to or obtained by the Person serving as the Administrative Agent or any of its Affiliates in any capacity. The Administrative Agent shall not be liable for any action taken or not taken by it with the consent or at the request of the Required Lenders (or such other number or percentage of the Lenders as shall be necessary, or as the Administrative Agent shall believe in good faith to be necessary, under the circumstances as provided in the Loan Documents) or in the absence of its own gross negligence or willful misconduct, as determined by a court of competent jurisdiction by a final and non-appealable judgment. The Administrative Agent shall not be deemed to have knowledge of any Default unless and until written notice thereof is given to the Administrative Agent by the Company, and the Administrative Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with any Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth in any Loan Document or the occurrence of any Default, (iv) the sufficiency, validity, enforceability, effectiveness or genuineness of any Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Article IV or elsewhere in any Loan Document, other than to confirm receipt of items expressly required to be delivered to the Administrative Agent.

The Administrative Agent shall be entitled to rely upon, and shall not incur any liability for relying upon, any notice, request, certificate, consent, statement, instrument, document or other writing (including any electronic message, Internet or intranet website posting or other distribution) believed by it to be genuine and to have been signed or sent by the proper Person (whether or not such Person in fact meets the requirements set forth in the Loan Documents for being the signatory or sender thereof). The Administrative Agent also may rely, and shall not incur any liability for relying, upon any statement made to it orally or by telephone and believed by it to be made by the proper Person (whether or not such Person in fact meets the requirements set forth in the Loan Documents for being the signatory or sender thereof), and may act upon any such statement prior to receipt of written confirmation thereof. The Administrative Agent may consult with legal counsel (who may be counsel for the Company), independent accountants and other experts selected by it, and shall not be liable for any action taken or not taken by it in accordance with the advice of any such counsel, accountants or experts.

The Administrative Agent may perform any and all its duties and exercise its rights and powers by or through any one or more sub-agents appointed by the

Administrative Agent. The Administrative Agent and any such sub-agent may perform any and all its duties and exercise its rights and powers through their respective Related Parties. The exculpatory provisions of the preceding paragraphs shall apply to any such sub-agent and to the Related Parties of the Administrative Agent and any such sub-agent, and shall apply to their respective activities in connection with the syndication of the credit facilities provided for herein as well as activities as the Administrative Agent.

Subject to the appointment and acceptance of a successor Administrative Agent as provided in this paragraph, the Administrative Agent may resign at any time by notifying the Lenders, the Issuing Banks and the Company. Upon any such resignation, the Required Lenders shall have the right, in consultation with the Company, to appoint a successor. If no successor shall have been so appointed by the Required Lenders and shall have accepted such appointment within 30 days after the retiring Administrative Agent gives notice of its resignation, then the retiring Administrative Agent may, on behalf of the Lenders and the Issuing Banks, appoint a successor Administrative Agent which shall be a bank with an office in New York, New York, or an Affiliate of any such bank. Upon the acceptance of its appointment as Administrative Agent hereunder by a successor, such successor shall succeed to and become vested with all the rights, powers, privileges and duties of the retiring Administrative Agent, and the retiring Administrative Agent shall be discharged from its duties and obligations hereunder and under the other Loan Documents. After the Administrative Agent's resignation hereunder, the provisions of this Article and Section 9.03 shall continue in effect for the benefit of such retiring Administrative Agent, its sub-agents and their respective Related Parties in respect of any actions taken or omitted to be taken by any of them while it was acting as Administrative Agent.

Each Lender acknowledges that it has, independently and without reliance upon the Administrative Agent or any other Lender and based on such documents and information as it has deemed appropriate, made its own credit analysis and decision to enter into this Agreement. Each Lender also acknowledges that it will, independently and without reliance upon the Administrative Agent or any other Lender, or any of the Related Parties of any of the foregoing, and based on such documents and information as it shall from time to time deem appropriate, continue to make its own decisions in taking or not taking action under or based upon this Agreement, any other Loan Document or related agreement or any document furnished hereunder or thereunder.

Each Lender, by delivering its signature page to this Agreement, or delivering its signature page to an Assignment and Assumption or any other Loan Document pursuant to which it shall become a Lender hereunder, shall be deemed to have acknowledged receipt of, and consented to and approved, each Loan Document and each other document required to be delivered to, or be approved by or satisfactory to, the Administrative Agent or the Lenders on the Effective Date.

Each Lender (a) represents and warrants, as of the date such Person became a Lender party hereto, to, and (b) covenants, from the date such Person became a Lender party hereto to the date such Person ceases being a Lender party hereto, for the benefit of, the Administrative Agent and the Arrangers and their respective Affiliates, and

not, for the avoidance of doubt, to or for the benefit of the Borrower or any other Loan Party, that such Lender is not using “plan assets” (within the meaning of 29 CFR § 2510.3-101, as modified by Section 3(42) of ERISA) of one or more Benefit Plans in connection with the Loans, the Letters of Credit or the Commitments.

None of the Arrangers, the Syndication Agents, the Documentation Agents or the Bookrunners shall have any duties or obligations under this Agreement or any other Loan Document (except in its capacity, as applicable, as a Lender or as Administrative Agent or an Issuing Bank), but all such Persons shall have the benefit of the indemnities provided for hereunder.

ARTICLE IX

Miscellaneous

Section 9.01. Notices. (a) Except in the case of notices and other communications expressly permitted to be given by telephone or electronic communication as contemplated by paragraph (b) below, all notices and other communications provided for herein shall be in writing and shall be delivered by hand or overnight courier service, mailed by certified or registered mail or sent by facsimile, as follows:

(i) if to the Company, to 34 Maple Street, Milford, Massachusetts 01757, Attention of John Lynch (Fax No. (508) 482-2249);

(ii) if to the Administrative Agent, to JPMCB in its capacity as a Lender or Issuing Bank or if such notice relates to a Letter of Credit, as follows: JPMorgan Chase Bank, N.A., 10 South Dearborn, Floor L2, Chicago, Illinois 60603, Attention of Nanette Wilson (Fax No. (844) 490-5663, Telephone No. (312) 385-7084), email: nanette.wilson@jpmorgan.com, jpm.agency.cri@jpmorgan.com; and

(iii) if to any other Lender or Issuing Bank, to it at its address (or facsimile number) set forth in its Administrative Questionnaire.

Notices sent by hand or overnight courier service, or mailed by certified or registered mail, shall be deemed to have been given when received; notices sent by fax shall be deemed to have been given when sent (or, if not given during normal business hours for the recipient, shall be deemed to have been given at the opening of business on the next business day for the recipient); and notices delivered through electronic communications to the extent provided in paragraph (b) below shall be effective as provided in such paragraph.

(b) Notices and other communications to the Lenders and Issuing Banks hereunder may be delivered or furnished by electronic communications (including email and Internet and intranet websites) pursuant to procedures approved in writing by the Administrative Agent; provided that the foregoing shall not apply to notices under Article II

to any Lender or Issuing Bank if such Lender or Issuing Bank, as applicable, has notified the Administrative Agent that it is incapable of receiving notices under such Article by electronic communication. Any notices or other communications to the Administrative Agent or the Company may be delivered or furnished by electronic communications pursuant to procedures approved in writing by the recipient thereof prior thereto; provided that approval of such procedures may be limited or rescinded by any such Person by notice to each other applicable Person.

(c) Any party hereto may change its address or facsimile number for notices and other communications hereunder by notice to the other parties hereto.

Section 9.02. Waivers; Amendments. (a) No failure or delay by the Administrative Agent, any Issuing Bank or any Lender in exercising any right or power hereunder or under any other Loan Document shall operate as a waiver thereof, nor shall any single or partial exercise of any such right or power, or any abandonment or discontinuance of steps to enforce such a right or power, preclude any other or further exercise thereof or the exercise of any other right or power. The rights and remedies of the Administrative Agent, the Issuing Banks and the Lenders hereunder and under the other Loan Documents are cumulative and are not exclusive of any rights or remedies that they would otherwise have. No waiver of any provision of any Loan Document or consent to any departure by any Loan Party therefrom shall in any event be effective unless the same shall be permitted by paragraph (b) of this Section, and then such waiver or consent shall be effective only in the specific instance and for the specific purpose for which given. Without limiting the generality of the foregoing, the making of a Loan or issuance of a Letter of Credit shall not be construed as a waiver of any Default, regardless of whether the Administrative Agent, any Lender or any Issuing Bank may have had notice or knowledge of such Default at the time.

(b) Except as provided in Sections 2.09 and 2.20, none of this Agreement, or any other Loan Document or any provision hereof or thereof may be waived, amended or modified except pursuant to an agreement or agreements in writing entered into by the Company and the Required Lenders or by the Company and the Administrative Agent with the consent of the Required Lenders or, in the case of any other Loan Document, pursuant to an agreement or agreements in writing entered into by the Administrative Agent and the Loan Party or Loan Parties that are parties thereto, in each case with the consent of the Required Lenders; provided that (1) any provision of this Agreement or any other Loan Document may be amended by an agreement in writing entered into by the Company and the Administrative Agent to cure any ambiguity, omission, defect or inconsistency so long as, in each case, the Lenders shall have received at least five Business Days' prior written notice thereof and the Administrative Agent shall not have received, within five Business Days of the date of such notice to the Lenders, a written notice from the Required Lenders stating that the Required Lenders object to such amendment and (2) no such agreement shall (i) increase any Commitment of any Lender without the written consent of such Lender, (ii) reduce the principal amount of any Loan, LC Disbursement or reimbursement obligation of the Company with respect to any Letter of Credit ("Reimbursement Obligation") or reduce the rate of interest thereon (other than as a result of waiving the applicability of any post-default increase in interest rates and

other than as a result of any change to any component definition of the term “Leverage Ratio” herein), or reduce any fees payable hereunder, without the written consent of each Lender adversely affected thereby, (iii) postpone the date of any scheduled payment of the principal amount of any Loan, LC Disbursement or Reimbursement Obligation, or any interest thereon, or any fees payable hereunder, or reduce the amount of, waive or excuse any such payment, or postpone the scheduled date of expiration of any Commitment, in each case, without the written consent of each Lender adversely affected thereby, (iv) change Section 2.17(b) or (c) in a manner that would alter the pro rata sharing of payments required thereby without the written consent of each Lender adversely affected thereby, or alter the manner in which payments or prepayments of principal, interest or other amounts hereunder shall be applied as among Lenders or Types of Loans without the written consent of each Lender adversely affected thereby, (v) change any of the provisions of this Section or the percentage set forth in the definition of “Required Lenders” or any other provision of any Loan Document specifying the number or percentage of Lenders (or Lenders of any Class) required to waive, amend or modify any rights thereunder or make any determination or grant any consent thereunder, without the written consent of each Lender (or each Lender of such Class, as the case may be) or (vi) change any provisions of any Loan Document in a manner that by its terms adversely affects the rights in respect of payments due to Lenders holding Loans of any Class differently than those of Lenders holding Loans of any other Class without the written consent of Lenders holding a majority in interest of the outstanding Loans and unused Commitments of each adversely affected Class; provided further that (A) no such agreement shall amend, modify or otherwise affect the rights or duties of the Administrative Agent or any Issuing Bank hereunder or under any other Loan Document without the prior written consent of the Administrative Agent or such Issuing Bank, as the case may be, and, without limiting the foregoing, any amendment or other modification of Section 2.19 shall require the prior written consent of the Administrative Agent and each Issuing Bank and (B) any waiver, amendment or modification of this Agreement that by its terms affects the rights or duties under this Agreement of the Lenders of one Class (but not the Lenders of any other Class) may be effected by an agreement or agreements in writing entered into by the Company and requisite percentage in interest of the affected Class of Lenders. Notwithstanding the foregoing, no consent with respect to any amendment, waiver or other modification of this Agreement or any other Loan Document shall be required of (x) any Defaulting Lender, except with respect to any amendment, waiver or other modification referred to in clause (i), (ii) or (iii) of the first proviso of this paragraph and then only in the event such Defaulting Lender shall be affected by such amendment, waiver or other modification.

Section 9.03. Expenses; Indemnity; Damage Waiver. (a) The Company shall pay (i) all reasonable out-of-pocket expenses incurred by the Administrative Agent and its Affiliates, including the reasonable fees, charges and disbursements of counsel for the Administrative Agent, in connection with the syndication of the credit facilities provided for herein, the preparation and administration of this Agreement or the other Loan Documents or any amendments, modifications or waivers of the provisions hereof or thereof (whether or not the transactions contemplated hereby or thereby shall be consummated), (ii) all reasonable out-of-pocket expenses incurred by each Issuing Bank

in connection with the issuance, amendment, renewal or extension of any Letter of Credit or any demand for payment thereunder and (iii) all reasonable out-of-pocket expenses (including reasonable fees, charges and disbursements of any counsel) incurred by the Administrative Agent, and, following and during the continuance of an Event of Default, any Issuing Bank and/or any Lender, in connection with the enforcement or protection of its rights in connection with any Loan Document, including its rights under this Section, or in connection with the Loans made or Letters of Credit issued hereunder, including all such out-of-pocket expenses incurred during any workout, restructuring or negotiations in respect of such Loans or Letters of Credit.

(b) The Company shall indemnify the Administrative Agent, each Arranger and Bookrunner, each Syndication Agent, each Documentation Agent, each Issuing Bank and each Lender and each Related Party of any of the foregoing Persons (each such Person being called an “Indemnitee”) against, and hold each Indemnitee harmless from, any and all losses, liabilities and reasonable out-of-pocket costs or expenses, including the reasonable fees, charges and disbursements of any counsel for any Indemnitee, incurred by or asserted against any Indemnitee arising out of, in connection with, or as a result of (i) any transaction or proposed transaction (whether or not consummated) in which any proceeds of any borrowing hereunder are applied or proposed to be applied, directly or indirectly, by the Company or any Subsidiary, (ii) any Loan or Letter of Credit or the use of the proceeds therefrom (including any refusal by an Issuing Bank to honor a demand for payment under a Letter of Credit if the documents presented in connection with such demand do not strictly comply with the terms of such Letter of Credit), (iii) the syndication of the credit facilities provided for herein and the execution, delivery or performance by the Company and the Subsidiaries of the Loan Documents, or any actions or omissions of the Company or any Subsidiary in connection therewith or (iv) any actual or overtly threatened claim, litigation, investigation or proceeding relating to any of the foregoing, whether or not such claim, litigation, investigation or proceeding is brought by the Company or any other Loan Party or their respective equity holders, Affiliates, creditors or any other third Person and whether based on contract, tort or any other theory and regardless of whether any Indemnitee is a party thereto; provided that such indemnity shall not, as to any Indemnitee, be available to the extent that such losses, liabilities, costs or expenses are determined by a court of competent jurisdiction by final and non-appealable judgment to have resulted from the gross negligence or willful misconduct of such Indemnitee.

(c) To the extent that the Company fails to pay any amount required to be paid by it to the Administrative Agent or any Issuing Bank or any of their Related Parties under paragraph (a) or (b) of this Section, each Lender severally agrees to pay to the Administrative Agent or such Issuing Bank, or such Related Party, as the case may be, such Lender’s pro rata share (determined as of the time that the applicable unreimbursed expense or indemnity payment is sought) of such unpaid amount; provided that the unreimbursed loss, liability, cost or expense, as the case may be, was incurred by or asserted against the Administrative Agent or such Issuing Bank (or such Related Party) in its capacity as such. For purposes hereof, a Lender’s “pro rata share” shall be determined based upon its share of the sum (without duplication) of the total Exposures and unused Commitments at the time.

(d) To the extent permitted by applicable law, the Company shall not assert, and the Company hereby waives, any claim against any Indemnitee, on any theory of liability, (i) for any damages arising from the use by others of information or other materials obtained through telecommunications, electronic or other information transmission systems (including the Internet) or (ii) for special, indirect, consequential or punitive damages (as opposed to direct or actual damages) arising out of, in connection with, or as a result of, this Agreement, any other Loan Agreement or any agreement or instrument contemplated hereby, the Transactions, any Loan or Letter of Credit or the use of the proceeds thereof.

(e) All amounts due under this Section shall be payable within 15 Business Days after receipt by the Company of a reasonably detailed invoice therefor.

Section 9.04. Successors and Assigns. (a) The provisions of this Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns permitted hereby (including any Affiliate of an Issuing Bank that issues any Letter of Credit), except that the Company may not assign or otherwise transfer any of its rights or obligations hereunder without the prior written consent of each Lender (and any attempted assignment or transfer by the Company without such consent shall be null and void). Nothing in this Agreement, expressed or implied, shall be construed to confer upon any Person (other than the parties hereto, their respective successors and assigns permitted hereby and, to the extent expressly contemplated hereby, Participants (to the extent provided in paragraph (e) of this Section), the Arrangers, the Syndication Agents, the Documentation Agents, the Bookrunners and the Related Parties of the Administrative Agent, the Arrangers, the Syndication Agents, the Documentation Agents, the Bookrunners, the Issuing Banks and the Lenders (including any Affiliate of the Issuing Bank that issues any Letter of Credit)) any legal or equitable right, remedy or claim under or by reason of this Agreement.

(b) Any Lender may assign to one or more assignees all or a portion of its rights and obligations under this Agreement (including all or a portion of its Commitments and the Loans or other amounts at the time owing to it) other than to a Defaulting Lender, to any natural person or to the Company or any of its Affiliates; provided that (i) except in the case of an assignment to a Lender, the Administrative Agent (and in the case of an assignment of all or a portion of a Revolving Commitment or any Lender's obligations in respect of its LC Exposure, each Issuing Bank) and, except (A) in the case of an assignment to a Lender, an Affiliate of a Lender or a Related Fund of any Lender or (B) if an Event of Default shall have occurred and be continuing, the Company, must give their prior written consent to such assignment (provided, that (x) no such consent shall be unreasonably withheld or delayed and (y) the Company shall be deemed to have consented to any such assignment unless it shall object thereto by written notice to the Administrative Agent within 10 Business Days after having received notice thereof), (ii) unless an Event of Default has occurred and is continuing, except in the case of an assignment to a Lender, an Affiliate of a Lender or a Related Fund of any Lender or an assignment of the entire remaining amount of the assigning Lender's Commitments and outstanding Loans, the amount of the Commitments and outstanding Loans of the assigning Lender subject to each such assignment (determined as of the date the

Assignment and Assumption with respect to such assignment is delivered to the Administrative Agent) shall not be less than \$10,000,000 unless each of the Company and the Administrative Agent otherwise consent, (iii) the parties to each assignment shall execute and deliver to the Administrative Agent an Assignment and Assumption, together with a processing and recordation fee of \$3,500 and (iv) the assignee, if it shall not be a Lender, shall deliver to the Administrative Agent an Administrative Questionnaire in which the assignee designates one or more credit contacts to whom all syndicate-level information (which may contain MNPI) will be made available and who may receive such information in accordance with the assignee's compliance procedures and applicable law, including Federal, State and foreign securities laws. Subject to acceptance and recording thereof pursuant to paragraph (d) of this Section, from and after the effective date specified in each Assignment and Assumption the assignee thereunder shall be a party hereto and, to the extent of the interest assigned by such Assignment and Assumption, have the rights and obligations of a Lender under this Agreement, and the assigning Lender thereunder shall, to the extent of the interest assigned by such Assignment and Assumption, be released from its obligations under this Agreement (and, in the case of an Assignment and Assumption covering all of the assigning Lender's rights and obligations under this Agreement, such Lender shall cease to be a party hereto but shall continue to be entitled to the benefits of Sections 2.14, 2.15, 2.16 and 9.03). At the time of any assignment, the assignee shall provide to the Company the documentation described in Section 2.16(f). Any assignment or transfer by a Lender of rights or obligations under this Agreement that does not comply with this paragraph shall be treated for purposes of this Agreement as a sale by such Lender of a participation in such rights and obligations in accordance with paragraph (e) of this Section.

(c) The Administrative Agent, acting for this purpose as a non-fiduciary agent of the Company, shall maintain at one of its offices in The City of New York a copy of each Assignment and Assumption delivered to it and records of the names and addresses of the Lenders, and the Commitment of, and principal amount (and stated interest) of the Loans and LC Disbursements owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive, and the Company, the Administrative Agent, the Issuing Banks and the Lenders shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as a Lender hereunder for all purposes of this Agreement, notwithstanding notice to the contrary. The Register shall be available for inspection by the Company and, as to entries relating to it, any Issuing Bank and any Lender, at any reasonable time and from time to time upon reasonable prior notice.

(d) Upon its receipt of a duly completed Assignment and Assumption executed by an assigning Lender and an assignee, the assignee's completed Administrative Questionnaire (unless the assignee shall already be a Lender hereunder), the processing and recordation fee referred to in paragraph (b) of this Section and any written consent to such assignment required by paragraph (b) of this Section, the Administrative Agent shall accept such Assignment and Assumption and record the information contained therein in the Register. No assignment shall be effective for purposes of this Agreement unless it has been recorded in the Register as provided in this paragraph.

(e) Any Lender may, without the consent of the Company, the Administrative Agent or any Issuing Bank, sell participations to one or more banks or other entities other than a Defaulting Lender (a "Participant") in all or a portion of such Lender's rights and obligations under this Agreement (including all or a portion of its Commitment and the Loans owing to it); provided that (i) such Lender's obligations under this Agreement shall remain unchanged, (ii) such Lender shall remain solely responsible to the other parties hereto for the performance of such obligations and (iii) the Company, the Administrative Agent, each Issuing Bank and the other Lenders shall continue to deal solely and directly with such Lender in connection with such Lender's rights and obligations under this Agreement. Any agreement or instrument pursuant to which a Lender sells such a participation shall provide that (A) such Lender shall retain the sole right to enforce this Agreement and to approve any amendment, modification or waiver of any provision of this Agreement and (B) such Participant shall be bound by the provisions of Section 9.12 as if such Participant were a Lender; provided that such agreement or instrument may provide that such Lender will not, without the consent of the Participant, agree to any amendment, modification or waiver described in clause (i), (ii), (iii) or (vi) of the first proviso to Section 9.02(b) that affects such Participant. Subject to paragraph (f) of this Section, the Company agrees that each Participant shall be entitled to the benefits of Sections 2.14, 2.15, 2.16 and 9.08 to the same extent as if it were a Lender and had acquired its interest by assignment pursuant to paragraph (b) of this Section. Each Lender that sells a participation shall, acting solely for this purpose as a non-fiduciary agent of the Company, maintain a register on which it enters the name and address of each Participant and the principal amounts (and stated interest) of each Participant's interest in the Loans or other obligations under this Agreement (the "Participant Register"); provided that no Lender shall have any obligation to disclose all or any portion of the Participant Register to any Person (including the identity of any Participant or any information relating to a Participant's interest in any Commitments, Loans, Letters of Credit or its other obligations under any Loan Document) except to the extent that such disclosure is necessary to establish that such Commitment, Loan, Letter of Credit or other obligation is in registered form under Section 5f.103-1(c) of the United States Treasury Regulations. The entries in the Participant Register shall be conclusive absent manifest error, and such Lender shall treat each person whose name is recorded in the Participant Register as the owner of such participation for all purposes of this Agreement notwithstanding any notice to the contrary.

(f) A Participant shall not be entitled to receive any greater payment under Section 2.14 or 2.16 than the applicable Lender would have been entitled to receive with respect to the participation sold to such Participant, unless the sale of the participation to such Participant is made with the Company's prior written consent. A Participant shall not be entitled to the benefits of Section 2.16 unless the Company is notified of the participation sold to such Participant and such Participant agrees, for the benefit of the Company, to comply with Section 2.16(e) as though it were a Lender. A Participant shall receive all information delivered under or in connection with this Agreement directly from the Lender from which it shall have purchased its participation, and the Company shall not have any obligation to furnish any such information directly to any Participant.

(g) Any Lender may at any time pledge or assign a security interest in all or any portion of its rights under this Agreement to secure obligations of such Lender, including any pledge or assignment to secure obligations to a Federal Reserve Bank or, in the case of a Lender that is an investment fund, to the trustee under the indenture to which such fund is a party, and this Section shall not apply to any such pledge or assignment of a security interest; provided that no such pledge or assignment of a security interest shall release a Lender from any of its obligations hereunder or substitute any such pledgee or assignee for such Lender as a party hereto.

Section 9.05. Survival. All covenants, agreements, representations and warranties made by the Loan Parties herein or in any other Loan Document or in the certificates or other instruments delivered in connection with or pursuant to this Agreement or any other Loan Document shall be considered to have been relied upon by the other parties hereto or thereto and shall survive the execution and delivery of this Agreement and any other Loan Document and the making of any Loans and issuance of any Letters of Credit, regardless of any investigation made by any such other party or on its behalf and notwithstanding that the Administrative Agent, any Issuing Bank or any Lender may have had notice or knowledge of any Default or incorrect representation or warranty at the time any credit is extended hereunder, and shall continue in full force and effect as long as the principal of or any accrued interest on any Loan or any fee or any other amount payable under this Agreement or any other Loan Document is outstanding and unpaid or any Letter of Credit is outstanding and so long as the Commitments have not expired or terminated. The provisions of Sections 2.14, 2.15, 2.16, 9.03 and 9.12 and Article VIII shall survive and remain in full force and effect regardless of the consummation of the transactions contemplated hereby, the repayment of the Loans, the expiration or termination of the Letters of Credit and the Commitments or the termination of this Agreement or any other Loan Document or any provision hereof or thereof; provided, however, that the provisions of Section 9.12 shall expire two years after the later of (i) the repayment of the Loans and the expiration or termination of the Letters of Credit and the Commitments and (ii) the termination of this Agreement.

Section 9.06. Counterparts; Integration; Effectiveness. (a) This Agreement may be executed in counterparts (and by different parties hereto on different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. This Agreement, the other Loan Documents and any separate letter agreements with respect to fees payable to the Administrative Agent constitute the entire contract among the parties relating to the subject matter hereof and supersede any and all previous agreements and understandings, oral or written, relating to the subject matter hereof, including the commitments of the Lenders and, if applicable, their Affiliates under any commitment letter entered into in connection with the credit facilities established hereunder and any commitment advices submitted in connection therewith (but do not supersede any other provisions of any such commitment letter or any fee letter entered into in connection with the credit facilities established hereunder). Except as provided in Section 4.01, this Agreement shall become effective when it shall have been executed by the Administrative Agent and when the Administrative Agent shall have received counterparts hereof which, when taken together, bear the signatures of each of the other parties hereto, and thereafter shall be

binding upon and inure to the benefit of the parties hereto and their respective successors and assigns. Delivery of an executed counterpart of a signature page of this Agreement by facsimile or other electronic communication shall be effective as delivery of a manually executed counterpart of this Agreement.

(b) The words “execution”, “signed”, “signature”, “delivery” and words of like import in or relating to any document to be signed in connection with this Agreement or any other Loan Document and the transactions contemplated hereby shall be deemed to include Electronic Signatures, deliveries or the keeping of records in electronic form, each of which shall be of the same legal effect, validity or enforceability as a manually executed signature, physical delivery thereof or the use of a paper-based recordkeeping system, as the case may be, to the extent and as provided for in any applicable law, including the Federal Electronic Signatures in Global and National Commerce Act, the New York State Electronic Signatures and Records Act, or any other similar state laws based on the Uniform Electronic Transactions Act; provided that nothing herein shall require the Administrative Agent to accept electronic signatures in any form or format without its prior written consent.

Section 9.07. Severability. Any provision of this Agreement held to be invalid, illegal or unenforceable in any jurisdiction shall, as to such jurisdiction, be ineffective to the extent of such invalidity, illegality or unenforceability without affecting the validity, legality and enforceability of the remaining provisions hereof; and the invalidity of a particular provision in a particular jurisdiction shall not invalidate such provision in any other jurisdiction.

Section 9.08. Right of Setoff. If an Event of Default shall have occurred and be continuing, each Lender and Issuing Bank, and each Affiliate of any of the foregoing, is hereby authorized at any time and from time to time, to the fullest extent permitted by law, to set off and apply any and all deposits (general or special, time or demand, provisional or final and in whatever currency denominated) at any time held and other obligations at any time owing by such Lender or Affiliate to or for the credit or the account of the Company against any of and all the obligations of the Company now or hereafter existing under this Agreement held by such Lender or Issuing Bank, irrespective of whether or not such Lender or Issuing Bank shall have made any demand under this Agreement and although such obligations may be unmatured. The rights of each Lender and Issuing Bank, and each Affiliate of any of the foregoing, under this Section are in addition to other rights and remedies (including other rights of setoff) that such Lender, Issuing Bank or Affiliate may have.

Section 9.09. Governing Law; Jurisdiction; Consent to Service of Process. (a) This Agreement shall be construed in accordance with and governed by the law of the State of New York.

(b) The Company hereby irrevocably and unconditionally submits, for itself and its property, to the exclusive jurisdiction of the Supreme Court of the State of New York sitting in the Borough of Manhattan in the City of New York and of the United States District Court of the Southern District of New York, and any appellate

court from any thereof, in any action or proceeding arising out of or relating to any Loan Document, or for recognition or enforcement of any judgment, and each of the parties hereto hereby irrevocably and unconditionally agrees that all claims in respect of any such action or proceeding may be heard and determined in such New York State or, to the extent permitted by law, in such Federal court. Each of the parties hereto agrees that a final judgment in any such action or proceeding shall be conclusive and may be enforced in other jurisdictions by suit on the judgment or in any other manner provided by law. Nothing in this Agreement or any other Loan Document shall affect any right that the Administrative Agent, any Issuing Bank or any Lender may otherwise have to bring any action or proceeding relating to this Agreement against the Company or its properties in the courts of any jurisdiction.

(c) The Company hereby irrevocably and unconditionally waives, to the fullest extent it may legally and effectively do so, any objection which it may now or hereafter have to the laying of venue of any suit, action or proceeding arising out of or relating to this Agreement or any other Loan Document in any court referred to in paragraph (b) of this Section. Each of the parties hereto hereby irrevocably waives, to the fullest extent permitted by law, the defense of an inconvenient forum to the maintenance of such action or proceeding in any such court.

(d) Each party to this Agreement irrevocably consents to service of process in the manner provided for notices in Section 9.01. Nothing in this Agreement or any other Loan Document will affect the right of any party to this Agreement to serve process in any other manner permitted by law.

Section 9.10. WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY LEGAL PROCEEDING DIRECTLY OR INDIRECTLY ARISING OUT OF OR RELATING TO THIS AGREEMENT, ANY OTHER LOAN DOCUMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY (WHETHER BASED ON CONTRACT, TORT OR ANY OTHER THEORY). EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THE FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION.

Section 9.11. Headings. Article and Section headings and the Table of Contents used herein are for convenience of reference only, are not part of this Agreement and shall not affect the construction of, or be taken into consideration in interpreting, this Agreement.

Section 9.12. Confidentiality. The Administrative Agent, each Issuing Bank and each Lender agrees to maintain the confidentiality of the Information (as

defined below), except that Information may be disclosed (a) to its and its Affiliates' directors, members, partners, officers, employees and agents, including accountants, legal counsel and other advisors, to Related Funds' directors and officers and to any direct or indirect contractual counterparty in swap agreements (it being understood that each Person to whom such disclosure is made will be informed of the confidential nature of such Information and instructed to keep such Information confidential), (b) to the extent requested by any regulatory authority (including (i) any self-regulatory authority, such as the National Association of Insurance Commissioners and (ii) in connection with a pledge or assignment permitted under Section 9.04(g)), (c) to the extent required by applicable laws or regulations or by any subpoena or similar legal process, (d) to any other party to this Agreement, (e) to the extent required or advisable in the judgment of counsel in connection with any suit, action or proceeding relating to the enforcement of rights of the Administrative Agent or the Lenders against the Company under this Agreement or any other Loan Document, (f) subject to an agreement containing provisions substantially the same as those of this Section, to any assignee of or Participant in, or any prospective assignee of or Participant in, any of its rights or obligations under this Agreement, (g) with the consent of the Company or (h) to the extent such Information (i) becomes publicly available other than as a result of a breach of this Section of which the Administrative Agent or such Lender is aware or (ii) becomes available to the Administrative Agent, any Issuing Bank or any Lender on a nonconfidential basis from a source other than the Company other than as a result of a breach of this Section of which the Administrative Agent or such Lender is aware. For the purposes of this Section, "Information" means all information received from the Company relating to the Company or its business, other than (A) any such information that is available to the Administrative Agent, any Issuing Bank or any Lender on a nonconfidential basis prior to disclosure by the Company other than as a result of a breach of this Section of which the Administrative Agent or such Lender is aware and (B) information pertaining to this Agreement routinely provided by arrangers of credit facilities to data service providers, including league table providers, that serve the lending industry. Any Person required to maintain the confidentiality of Information as provided in this Section shall be considered to have complied with its obligation to do so if such Person has exercised the same degree of care to maintain the confidentiality of such Information as such Person would accord to its own confidential information.

Section 9.13. Conversion of Currencies. (a) If, for the purpose of obtaining judgment in any court, it is necessary to convert a sum owing hereunder in one currency into another currency, each party hereto agrees, to the fullest extent that it may effectively do so, that the rate of exchange used shall be that at which in accordance with normal banking procedures in the relevant jurisdiction the first currency could be purchased with such other currency on the Business Day immediately preceding the day on which final judgment is given.

(b) The obligations of the Company in respect of any sum due to any party hereto or any holder of the obligations owing hereunder (the "Applicable Creditor") shall, notwithstanding any judgment in a currency (the "Judgment Currency") other than the currency in which such sum is stated to be due hereunder (the "Agreement Currency"), be discharged only to the extent that, on the Business Day following receipt

by the Applicable Creditor of any sum adjudged to be so due in the Judgment Currency, the Applicable Creditor may in accordance with normal banking procedures in the relevant jurisdiction purchase the Agreement Currency with the Judgment Currency; if the amount of the Agreement Currency so purchased is less than the sum originally due to the Applicable Creditor in the Agreement Currency, the Company agrees, as a separate obligation and notwithstanding any such judgment, to indemnify the Applicable Creditor against such loss. The obligations of the Company contained in this Section 9.13 shall survive the termination of this Agreement and the payment of all other amounts owing hereunder.

Section 9.14. Release of Subsidiary Guarantors. Notwithstanding any contrary provision herein or in any other Loan Document, if the Company shall request the release under the Subsidiary Guarantee Agreement of any Subsidiary to be sold or otherwise disposed of (including through the sale or disposition of any Subsidiary owning any such Subsidiary) to a Person other than the Company or a Subsidiary in a transaction permitted under the terms of this Agreement and shall deliver to the Administrative Agent a certificate to the effect that such sale or other disposition will comply with the terms of this Agreement, the Administrative Agent, if satisfied that the applicable certificate is correct, shall, without the consent of any Lender, execute and deliver all such instruments, releases or other agreements, and take all such further actions, as shall be necessary to effectuate the release of such Subsidiary at the time of or at any time after the completion of such sale or other disposition.

Section 9.15. USA PATRIOT Act. Each Lender hereby notifies the Company that pursuant to the requirements of the USA PATRIOT Act, it is required to obtain, verify and record information that identifies the Company, which information includes the name and address of the Company and other information that will allow such Lender to identify the Company in accordance with the USA PATRIOT Act.

Section 9.16. No Fiduciary Relationship. The Company agrees that in connection with all aspects of the transactions contemplated hereby and any communications in connection therewith, the Company and its Affiliates, on the one hand, and the Administrative Agent, the Lenders, the Issuing Banks and their Affiliates, on the other hand, will have a business relationship that does not create, by implication or otherwise, any fiduciary duty on the part of the Administrative Agent, the Lenders, the Issuing Banks or their Affiliates, and no such duty will be deemed to have arisen in connection with any such transactions or communications.

Section 9.17. Non-Public Information. (a) Each Lender acknowledges that all information, including requests for waivers and amendments, furnished by the Company or the Administrative Agent pursuant to or in connection with, or in the course of administering, this Agreement will be syndicate-level information, which may contain MNPI. Each Lender represents to the Company and the Administrative Agent that (i) it has developed compliance procedures regarding the use of MNPI and that it will handle MNPI in accordance with such procedures and applicable law, including Federal, state and foreign securities laws and (ii) it has identified in its Administrative Questionnaire a credit contact who may receive information that may contain MNPI in accordance with its compliance procedures and applicable law, including Federal, state and foreign securities laws.

(b) The Company and each Lender acknowledges that, if information furnished by the Company pursuant to or in connection with this Agreement is being distributed by the Administrative Agent through IntraLinks/IntraAgency, SyndTrak or another website or other information platform (the “Platform”), (i) the Administrative Agent shall post any information that the Company has indicated as containing MNPI solely on that portion of the Platform as is designated for Private Side Lender Representatives and (ii) if the Company has not indicated whether any information furnished by it pursuant to or in connection with this Agreement contains MNPI, the Administrative Agent shall post such information solely on that portion of the Platform as is designated for Private Side Lender Representatives. The Company agrees to clearly designate all information provided to the Administrative Agent by or on behalf of the Company that is suitable to be made available to Public Side Lender Representatives, and the Administrative Agent shall be entitled to rely on any such designation by the Company without liability or responsibility for the independent verification thereof.

Section 9.18. Acknowledgement and Consent to Bail-In of EEA Financial Institutions. Notwithstanding anything to the contrary in any Loan Document or in any other agreement, arrangement or understanding among any such parties, each party hereto acknowledges that any liability of any EEA Financial Institution arising under any Loan Document may be subject to the Write-Down and Conversion Powers of any EEA Resolution Authority and agrees and consents to, and acknowledges and agrees to be bound by:

(a) the application of any Write-Down and Conversion Powers by an EEA Resolution Authority to any such liabilities arising hereunder that may be payable to it by any party hereto that is an EEA Financial Institution; and

(b) the effects of any Bail-in Action on any such liability, including, if applicable:

(i) a reduction in full or in part or cancellation of any such liability;

(ii) a conversion of all, or a portion of, such liability into shares or other instruments of ownership in such EEA Financial Institution, its parent entity, or a bridge institution that may be issued to it or otherwise conferred on it, and that such shares or other instruments of ownership will be accepted by it in lieu of any rights with respect to any such liability under this Agreement or any other Loan Document; or

(iii) the variation of the terms of such liability in connection with the exercise of the Write-Down and Conversion Powers of any EEA Resolution Authority.

[Signatures follow]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed by their respective authorized officers as of the day and year first above written.

WATERS CORPORATION,

By:

 /s/ John Lynch

Name: John Lynch

Title: Vice President – Treasurer, Investor
Relations

[Signature Page to Waters Corporation Credit Agreement]

JPMORGAN CHASE BANK, N.A., individually and as
Administrative Agent and as an Issuing Bank,

By:

/s/ D. Scott Farquhar

Name: D. Scott Farquhar

Title: Executive Director

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: Bank of America, N.A.

By: _____
/s/ Linda Alto

Name: Linda Alto
Title: Senior Vice President

*By: _____

Name:
Title:

* For Lenders requiring a second signature line.

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: HSBC Bank USA, N.A.

By: _____
/s/ Elizabeth Peck

Name: Elizabeth Peck
Title: Director

*By: _____

Name:
Title:

* For Lenders requiring a second signature line.

[Signature Page to Waters Corporation Credit Agreement]

LENDER: Citizens Bank, N.A.

By:

 /s/ Kathryn Hinderhofer

Name: Kathryn Hinderhofer

Title: Officer

*By:

Name:

Title:

* For Lenders requiring a second signature line.

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: The Bank of Tokyo-Mitsubishi, UFJ, LTD.

By:

/s/ Jaime Johnson

Name: Jaime Johnson

Title: Director

*By:

Name:

Title:

* _____
For Lenders requiring a second signature line.

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: U.S. Bank National Association

By:

 /s/ Joseph M. Schnorr

Name: Joseph M. Schnorr

Title: Senior Vice President

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: TD Bank, N.A.

By: _____
/s/ Matt Waszmer

Name: Matt Waszmer
Title: Senior Vice President

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: DNB Capital, LLC

By:

/s/ Christian Rynning

Name: Christian Rynning

Title: First Vice President

*By:

/s/ Thomas Tangen

Name: Thomas Tangen

Title: Senior Vice President,
Head of Healthcare

* For Lenders requiring a second signature line.

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: Barclays Bank, PLC

By: _____
/s/ Nyagaka Onger

Name: Nyagaka Onger
Title: Managing Director
Executed in New York

*By: _____

Name:
Title:

* For Lenders requiring a second signature line.

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: Keybank National Association

By:

 /s/ Marc Evans

Name: Marc Evans

Title: Vice President

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: Suntrust Bank

By:

/s/ Carlos Cruz

Name: Carlos Cruz

Title: Vice President

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: The Huntington National Bank

By:

/s/ Jared Shaner

Name: Jared Shaner

Title: Vice President

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: Branch Banking and Trust Company

By:

/s/ Jeff Skalka

Name: Jeff Skalka

Title: Vice President

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: PNC Bank, National Association

By:

/s/ Michael Richards

Name: Michael Richards

Title: Sr. Vice President,
Managing Director

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: The Bank of New York Mellon

By:

/s/ Thomas J. Tarasovich, Jr.

Name: Thomas J. Tarasovich, Jr.

Title: Vice President

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: The Governor and Company of the Bank of
Ireland

By:

/s/ Conor Linehan

Name: Conor Linehan

Title: Authorized Signatory

*By:

/s/ Dorothy Halligan

Name: Dorothy Halligan

Title: Authorized Signatory

* For Lenders requiring a second signature line.

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: The Northern Trust Company

By:

/s/ Eric Siebert

Name: Eric Siebert

Title: SVP

*By:

Name:

Title:

* _____
For Lenders requiring a second signature line.

[Signature Page to Waters Corporation Credit Agreement]

SIGNATURE PAGE TO
WATERS CORPORATION
CREDIT AGREEMENT

LENDER: Webster Bank, N.A.

By:

/s/ Raymond C. Hoefling

Name: Raymond C. Hoefling

Title: Senior Vice President

*By:

Name:

Title:

* For Lenders requiring a second signature line.

[Signature Page to Waters Corporation Credit Agreement]

Waters Corporation and Subsidiaries

12/31/2017

Waters Corporation (Delaware)
 Waters Technologies Corporation (Delaware)
 Waters Australia PTY LTD.
 Waters A/S (Denmark)
 Waters AG (Switzerland)
 Waters NV (Belgium)
 Waters Cromatografia SA (Spain)
 Waters SA de CV (Mexico)
 Waters Technologies do Brasil Ltda (Brazil)
 Waters Ges.MBH (Austria)
 Waters Kft (Hungary)
 Waters Sp.Zo.o (Poland)
 Waters OOO (Russia)
 Waters SAS (France)
 Waters Sverige AB (Sweden)
 Waters Limited (Canada)
 TA Instruments-Waters LLC (Delaware)
 Environmental Resource Assoc., Inc. (Colorado)
 Waters India Pvt. Ltd.
 Waters Asia Limited (Delaware)
 Waters Korea Limited (Korea)
 Waters China Ltd. (Hong Kong)
 Waters Technologies (Shanghai) Ltd (China)
 Waters Pacific Pte Ltd (Singapore)
 Waters Analytical Instruments Snd Bhd (Malaysia)
 Waters Holdings Corporation (Delaware)
 Nihon Waters K.K. (Japan)
 TA Instruments Japan, Inc. (Japan)
 Waters SpA (Italy)
 Waters Finance V LLC (Delaware)
 Waters Technologies International Limited (Cayman) (1)
 Waters Global International Limited (Cayman) (1)
 Waters Global Technologies Limited (UK) (1)
 Waters Milford Limited (UK) (1)
 Milford International Limited (UK) (1)
 Waters Global Limited (UK) (1)
 Waters European Investments LLC
 Milford International Limited
 Manchester International Limited
 Melbourne International Limited
 MM European Holdings LLP (UK) (1)
 Waters Technologies Holdings Limited (Ireland)
 Waters Celtic Holdings Ltd (Ireland)
 Waters Chromatography Ireland Ltd (Ireland)
 Waters Technologies Ireland Ltd (Ireland)
 Waters Romania Srl
 Waters GmbH (Germany)
 Expert Systems Solutions Srl (Italy) (1)
 Waters Luxembourg SARL (Luxembourg)
 Waters (TC) Israel Ltd.
 Micromass Holdings Ltd. (UK)
 ULSP BV (Netherlands)
 Waters Chromatography BV (Netherlands)
 Waters Chromatography Europe BV (Netherlands)
 Waters Tech. LC-MS Unapessol Lda (Portugal)
 Micromass Ltd. (UK)
 Waters Limited (UK)
 PRA Europe Limited (UK) (1)
 Micromass UK Ltd. (UK)
 Waters Research Center Kft (Hungary)
 MPE Orbur (UK)
 Midland Precision Equipment Co Ltd (UK)

All subsidiaries are 100% owned unless otherwise indicated.

(1) Dormant

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-18371, 333-81723, 333-60054, 333-92332, 333-110613, 333-137990, 333-160507, 333-183721) of Waters Corporation of our report dated February 27, 2018 relating to the financial statements, financial statement schedule and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

Boston, Massachusetts
February 27, 2018

**CHIEF EXECUTIVE OFFICER CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Christopher J. O'Connell, certify that:

1. I have reviewed this annual report on Form 10-K of Waters Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2018

/s/ Christopher J. O'Connell

Christopher J. O'Connell
Chief Executive Officer

**CHIEF FINANCIAL OFFICER CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002**

I, Sherry L. Buck, certify that:

1. I have reviewed this annual report on Form 10-K of Waters Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: February 27, 2018

/s/ Sherry L. Buck

Sherry L. Buck
Chief Financial Officer

**CHIEF EXECUTIVE OFFICER CERTIFICATION PURSUANT TO 18 U.S.C.
SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

The certification set forth below is hereby made solely for the purpose of satisfying the requirements of Section 906 of the Sarbanes-Oxley Act of 2002 and may not be relied upon or used for any other purposes.

In connection with the Annual Report of Waters Corporation (the "Company") on Form 10-K for the period ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Christopher J. O'Connell, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge: (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement required by Section 906 or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Date: February 27, 2018

By: /s/ Christopher J. O'Connell

Christopher J. O'Connell

Chief Executive Officer

**CHIEF FINANCIAL OFFICER CERTIFICATION PURSUANT TO 18 U.S.C.
SECTION 1350, AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

The certification set forth below is hereby made solely for the purpose of satisfying the requirements of Section 906 of the Sarbanes-Oxley Act of 2002 and may not be relied upon or used for any other purposes.

In connection with the Annual Report of Waters Corporation (the "Company") on Form 10-K for the period ended December 31, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Sherry L. Buck, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to my knowledge: (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

A signed original of this written statement required by Section 906 or other document authenticating, acknowledging or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

Date: February 27, 2018

By: /s/ Sherry L. Buck

Sherry L. Buck
Chief Financial Officer

